Teachers' Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City

Emmy Godfrey Opiyo

24/U/0689/MED/PS

BAE (GU)

A Dissertation Submitted to the Directorate of Research and Graduate Studies in Partial Fulfillment of the Requirements for the award of the Master's Degree in Education Management of Gulu University

October, 2026

Declaration

I Emmy Godfrey Opiyo hereby declare that this Dissertation titled "*Teachers' Continuous Professional Development and Assessment Practices in the Competency Based Education in Secondary Schools in Gulu City*" is my original work that has never been submitted for an award of a Degree or Certificate at any University.

Signature:..... Date: 07/10/2026.....

Emmy Godfrey Opiyo

24/U/0689/MED/PS

CamScanner

Approval

This dissertation titled "*Teachers' Continuous Professional Development and Assessment Practices in the Competency Based Education in Secondary Schools in Gulu City*" was prepared under our supervision and is now ready for the award of a Masters of Education Management in Education.

Signature..... Date: 7/10/26

Dr. George Opio (PhD)

Signature..... Date: 7/10/2026

Ms. Ajok Teddy Kilama

CamScanner

Dedication

I dedicate this research work with profound love and gratitude to my beloved grandparents, the late Morris Ongee and Emmanuel Okeny**,** whose cherished memories and enduring legacies continue to inspire me, and Ms. Margret Ongee and Mary Apaco, whose love, wisdom, prayers, and encouragement remain a constant source of strength, and to my dear parents, Ms. Concy Angee and Mr. David Dickens Ongee**,** for their unconditional love, sacrifices, unwavering support, guidance, and steadfast commitment to my education, all of which have made this journey and achievement possible.

Acknowledgement

I wish to express my sincere gratitude to everyone whose contribution, in one way or another, made the completion of this research work possible.

My heartfelt thanks go to my beloved wife, Recho Akello, whose love, patience, understanding, sacrifices, and constant encouragement sustained me throughout this programme. I am equally grateful to my children, Ashlaine Maria Ongee, Ezra Kyle Ongee, Jovia Rebecca Lakareber, Ayero Mary, and Agenorwot Lydia, whose love, joy, and inspiration gave me renewed strength and motivation to persevere.

I am especially indebted to my supervisors, Dr. George Opio and Ms. Ajok Teddy Kilama , for their scholarly guidance, professional counsel, insightful criticism, encouragement, and steadfast assistance throughout the research process. Their expertise and commitment were invaluable in refining this study and guiding me towards its successful completion.

I am also grateful to my coursework lecturers, Dr. Gloria Lamaro, Dr. Tom Henry Ogwang, Dr. John Baptist Hab'mana, Mr. Okot E. Ambrose, and Mr. Luwa John Charles, for the knowledge, mentorship, and academic foundation they provided during my studies. Their teaching and intellectual guidance significantly contributed to my academic and professional development.

Special appreciation goes to my friends, Job Lubangakene and Komuhangi Bernadette, for their companionship, encouragement, and support throughout my academic journey. I also sincerely appreciate my classmates for their friendship, academic support, and shared experiences throughout the programme.

Table of Contents

Declaration i

Approval ii

Dedication iii

Acknowledgement iv

Table of Contents v

List of Tables x

List of Figures xi

List of Abbreviations/Acronyms xii

Abstract xiii

Chapter One 1

Introduction 1

1.1 Overview 1

1.2 Background to the study 1

1.2.1 Historical Background 2

1.2.2 Theoretical Background 6

1.2.3 Conceptual Background 8

1.2.4 Contextual Background 10

1.3 Problem Statement 11

1.4.1 General Objective 12

1.4.2 Specific Objectives 12

1.5 Research Questions 12

1.6 Scope of the Study 13

1.6.1 Content Scope 13
1.6.2 Geographical Scope 13
1.6.3 Time Scope 13
1.7 Significance of the Study 14
1.8 Conceptual Framework of the Study 15
Chapter Two 16
Literature Review 16
2.0 Introduction 16
2.1 Theoretical Review 16
2.1.1 Vroom's Expectancy Theory 16
2.1.2 Social Constructivist Theory 18
2.1.3 The Social Cognitivist Theory 20
2.2 The Level of Teachers' Continuous Professional Development (TCPD) in Secondary Schools 23
2.3 Assessment Practices in Competency Based Education in Secondary Schools in Gulu City 30
2.3.1 Continuous Assessment Practices 30
2.3.2 Formative Assessment Practices 33
2.3.3 Summative Assessment Practices 35
2.4 Relationship between Teachers' Continuous Professional Development (TCPD) and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City 37
Chapter Three 48
Methodology 48
3.1 Introduction 48

3.2 Research Approach 48
3.3 Research Design 49
3.4 Study Area 49
3.5 Study Population 50
3.6 Sample Size and Selection 51
3.7 Sources of Data 52
3.7.1 Primary Data Sources 52
3.7.2 Secondary Data Sources 52
3.8 Data Collection Methods 53
3.8.1 Structured questionnaire survey 53
3.8.2 Semi-structured interviews 53
3.8.3 Document Review 54
3.9 Data Collection Instruments 54
3.9.1 Questionnaire 54
3.9.2 Interview guide 55
3.9.3 Document analysis checklist 55
3.10 Data Quality Control 56
3.10.1 Validity 56
3.10.2 Reliability 56
3.11 Data Analysis 57
3.12 Ethical Considerations 58
3.13 Limitations to the Study 59
Chapter Four 60

Data Presentation, Analysis and Interpretation 60
4.1 Introduction 60
4.2 Background Information of Respondents 61
4.3 Research Question One: What is the Level of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City? 63
4.3.1 Qualitative Data Presentation, Analysis and Interpretation for Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City 65
4.4. Research Question Two: What is the Level of Use of Assessment Practices in Competency Based Education in Secondary Schools in Gulu City? 69
4.5 Research Question Three: What is the Relationship between Teachers' Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City? 76
Chapter Five 79
Discussion, Conclusions and Recommendations 79
5.1 Introduction 79
5.2 Level of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City 79
5.3 The Level of Use of Assessment Practices in Competency Based Education in Secondary Schools in Gulu City 84
5.4. The Relationship between Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City 88
5.5 Conclusion 91

5.6. Recommendations 92
5.7 Suggestions for further studies 93
References 94
Appendices 98
Appendix A: Questionnaire for teachers 98
Appendix B: Interview Guide for Headteachers 101
Appendix C: Interview Guide for Deputy Headteachers 102
Appendix D: Interview Guide for Directors of Studies (DOS) 103
Appendix F: Document Review Guide 104
Appendix G: Research Budget 106
Appendix H: Study Plan 107
Appendix I: Sketch Map Showing Study Location 108
Appendix J: Krejcie and Morgan Table 109
Appendix K: Introductory Letter 110

List of Tables

Table 3. 1: Sampling frame 50

Table 3. 2: Sampling size and selection 51

Table 4. 1: Response Rate 60

Table 4. 2: Background Information of Respondents (N = 256) 61

Table 4. 3: Mean, Standard Deviation, and Range for Teachers' Continuous Professional Development (N = 256) 63

Table 4. 4: Constructs, Themes, Sub-themes and Interpretation of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools 67

Table 4. 5: Mean and Standard Deviation of Assessment Practices in CBE 69

Table 4. 6: One-Way ANOVA on Assessment Practices in CBE by Category of Respondents .. 71

Table 4. 7: Constructs, Themes, Sub-themes and Interpretation of Assessment Practices in CBE 75

Table 4. 8: Pearson Correlation Matrix for Teachers' Continuous Professional Development and Assessment Practices in CBE (N = 256) 76

Table 4. 9: Multiple Regression Analysis 77

List of Figures

Figure 1. 1: Conceptual Framework 15

List of Abbreviations/Acronyms

ADEA: Association for the Development of Education in Africa

CBE: Competency Based Education

CPD: Continuous Professional Development (see also TCPD)

DOS: Director(s) of Studies

ICT: Information and Communications Technology

MoES: Ministry of Education and Sports (Uganda)

NCDC: National Curriculum Development Centre (Uganda)

NPA: National Planning Authority (Uganda)

OECD: Organisation for Economic Co-operation and Development

PLE: Primary Leaving Examination (Uganda)

SD: Standard Deviation

SPSS: Statistical Package for the Social Sciences

STEM: Science, Technology, Engineering, and Mathematics

TCPD: Teachers' Continuous Professional Development

TDMS: Teacher Development Management System (Uganda)

UBOS: Uganda Bureau of Statistics

UCE: Uganda Certificate of Education

UNEB: Uganda National Examinations Board

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations Children's Fund

Abstract

The study examined the relationship between teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE) in secondary schools in Gulu City. The study was guided by three specific objectives: to assess the level of teachers' continuous professional development in competency based education in secondary schools in Gulu City; to examine the level of use of assessment practices in competency based education in secondary schools in Gulu City; and to determine the relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City. The study adopted a mixed methods approach and a sequential explanatory research design. Data were collected from 256 respondents using questionnaires and semi-structured interview guides. Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS), Version 26.0, while qualitative data were analysed thematically. The findings revealed that the level of teachers' continuous professional development in competency based education was low. The findings further showed that the level of use of assessment practices in competence-based education was moderate. In addition, the findings revealed a strong positive relationship between teachers' continuous professional development and assessment practices in competency based education. The study concluded that teachers' continuous professional development is an important factor associated with assessment practices in competence-based education in secondary schools in Gulu City. The study recommended that the government allocate more resources to support teachers' continuous professional development in competency based education in secondary schools.

Chapter One

Introduction

1.1 Overview

Assessment practices are central to effective curriculum implementation as they measure both teaching quality and learner achievement, while their impact is strengthened through teachers continuous professional development (TCPD) that enhances teacher pedagogy, assessment literacy, and reflective practice (Okumu & Opio, 2023; Ainomugisha, 2021). Uganda's competency based education promotes competency based, learner-centered, and continuous assessment (MoES, 2022; UNICEF Uganda, 2023). However, reliance on summative examinations, coupled with overcrowded classrooms and limited TCPD hinders effective implementation of CBE in Gulu City (Mugisha, 2021). Gaps between policy and classroom realities further restrict timely feedback (UNESCO, 2022). As a result, inadequate teacher assessment literacy maintains traditional assessment practices, thereby limiting the transformative potential of TCPD (Ainomugisha, 2021).

This chapter presents the background to the study, problem statement, general objective and specific objectives. It also presents research questions, scope of the study, significance of the study, justification for the study and ethical considerations.

1.2 Background to the study

This section presents background to the study thematically in terms of historical, theoretical, conceptual and contextual perspectives.

1.2.1 Historical Background

Assessment practices have increasingly moved beyond an exclusive emphasis on recalling factual information towards approaches that provide evidence of learners' understanding, application of knowledge, problem-solving, critical thinking, and progress. Contemporary assessment reforms increasingly emphasise the complementary use of formative and summative assessment, feedback, and diverse tasks that capture a broader range of learner competencies (Brown, 2022; European Commission, 2023).

In Europe, assessment reforms have increasingly accompanied the shift towards competency based education. The European Commission (2023) reports that European education systems are introducing competency based education that emphasise the application of knowledge in real-life contexts. These reforms require assessment approaches that measure not only knowledge but also learners' ability to apply what they have learned in different situations, together with relevant personal and social competencies. Consequently, European systems are placing greater attention on the alignment of formative and summative assessment and on teachers' capacity to use varied classroom-based assessment approaches (European Commission, 2023).

In the United States, standardised assessment remains an important component of educational measurement and accountability, while classroom assessment has increasingly incorporated formative approaches to inform instruction. Recent evidence shows that state education agencies have developed definitions and guidance for formative assessment practices, while research on secondary classrooms emphasises gathering evidence of student thinking, responding to that evidence, providing feedback, and reflecting on assessment practices (Huynh et al., 2022; Lolkus et al., 2022). Historical analysis also indicates that test-based accountability has remained an

important feature of American education, illustrating the continuing coexistence of large-scale testing and classroom-based assessment (Rury et al., 2022).

In Asia, recent assessment reforms have increasingly focused on identifying learners' individual needs and using assessment information to improve teaching and learning. UNESCO's Asia-Pacific guidance emphasises diagnostic assessment as an approach for understanding variations in learners' knowledge and skills and for enabling teachers to provide more responsive instruction. These developments reflect a broader movement towards assessment systems that use evidence of learning to address learning gaps rather than relying only on uniform examinations (Nizet et al., 2023; UNESCO, 2024).

Across Africa, many education systems have adopted competency based education reforms intended to develop broader knowledge, skills, values, and abilities required for participation in contemporary social and economic life. However, recent evidence shows that the implementation of competency based assessment remains uneven. A recent scoping review of competency based education implementation in African countries found continued challenges related to teacher preparation, assessment practices, ICT integration, limited resources, and large class sizes (Wawirea et al., 2026). Similarly, evidence from East Africa shows increasing use of approaches designed to assess complex competencies, including problem-solving, collaboration, life skills, and values, through approaches such as scenario-based and performance-oriented assessment (Care et al., 2024; Giacomazzi, 2024).

In East Africa, competency based education reforms have increasingly encouraged assessment approaches capable of capturing knowledge application and twenty-first-century competencies. Recent regional evidence from Kenya, Tanzania, and Uganda shows growing attention to the

assessment of life skills and values such as collaboration, problem-solving, respect, and self-awareness. These developments have also encouraged the use of scenario-based and performance-oriented assessment tasks supported by rubrics rather than depending exclusively on conventional written examinations (Care et al., 2024; Mutweleli et al., 2024).

In Uganda, assessment practices have been significantly influenced by the implementation of the competency based education, which was introduced from 2020. Recent research indicates that the transition has faced difficulties because established assessment practices have continued in some cases to place greater emphasis on memory than on critical and creative problem-solving (Zami Atibuni et al., 2024). Research involving Ugandan secondary school teachers has also identified shortages of instructional materials, inadequate infrastructure, limited access to technological devices, large student-teacher ratios, and insufficient teacher preparation as challenges affecting effective implementation of the revised curriculum (Chemutai et al., 2024). More recently, the National Curriculum Development Centre has strengthened competency based assessment through reforms at the Advanced Secondary level. The aligned curriculum introduced criterion-referenced assessment, focusing on defined standards of knowledge, skills, attitudes, and values (NCDC, 2025). In 2026, NCDC further issued assessment guidelines providing learning outcomes, assessment constructs, scoring rubrics, and sample tasks to guide classroom and end-of-cycle assessment of learners' competencies (NCDC, 2026).

Teachers' continuous professional development (TCPD) has increasingly been understood as a career-long process through which teachers strengthen their knowledge, pedagogical skills, professional competencies, and capacity to respond to changing curriculum and learner needs. Contemporary approaches extend beyond occasional workshops to include collaborative

learning, professional learning communities, mentoring, reflection, digital learning, and other forms of sustained professional learning (OECD, 2021; UNESCO, 2024). The emphasis on continuous development reflects the growing expectation that teachers should continually adapt their professional knowledge and practices to changing educational demands.

Globally, TCPD is closely associated with improvements in teachers' professional capacity and the implementation of education reforms. UNESCO (2024) emphasises lifelong professional development, teacher collaboration, professional autonomy, and supportive working environments as important components of a strong teaching profession. Recent research also suggests that teachers' engagement in professional development is influenced by factors such as time, workload, resources, motivation, opportunities for collaboration, and the continuity of professional learning activities (Mekonnen, 2025). These factors are particularly important where teachers are expected to implement new curricula and assessment approaches.

In Uganda, TCPD has become increasingly significant in supporting teachers to respond to curriculum and pedagogical reforms. Evidence from secondary schools in Gulu City indicates that continuous professional development contributes to teachers' acquisition of new ideas, skills, confidence, and pedagogical competencies. Okumu and Opio (2023) found that CPD was widely regarded by teachers as an important approach for improving pedagogical skills, while also identifying the need for adequate time, facilities, tools, and incentives to support professional learning.

More recent developments demonstrate continued policy attention to TCPD in Uganda. In 2025, the Ministry of Education and Sports, with support from UNESCO, reviewed the national Continuous Professional Development Framework with the aim of strengthening teachers'

ongoing learning, professional growth, and career development. The review proposed clearer CPD structures, credit points linked to professional growth, master-trainer preparation, and communities of practice to strengthen knowledge sharing among teachers (UNESCO, 2025). These developments demonstrate the increasing recognition of TCPD as an important mechanism for strengthening teacher capacity and supporting the implementation of education reforms in Uganda.

Overall, recent evidence suggests that assessment practices and TCPD are increasingly interconnected within competency-based education. As assessment shifts towards measuring application, critical thinking, problem-solving, practical skills, values, and other competencies, teachers require continuous opportunities to develop the knowledge and skills necessary to design, administer, interpret, and use appropriate assessment methods. In Uganda, this relationship is particularly relevant because the implementation of competency-based curricula requires teachers to adapt both their instructional approaches and their assessment practices (European Commission, 2023; Care et al., 2024; NCDC, 2026; UNESCO, 2025).

1.2.2 Theoretical Background

The study is grounded in the Vroom's Expectancy Theory of Motivation, advanced by Victor H. Vroom, a Canadian-born psychologist and management professor in 1964. It is a motivational model that explains how individuals decide to apply effort based on expected outcomes, comprising three interrelated components: expectancy, instrumentality, and valence (Vroom, 1964).

Vroom assumes that individuals are rational, goal-directed decision-makers who strategically allocate effort toward achieving outcomes they value. Motivation is context-dependent, formed

by environmental factors such as leadership, organizational culture, and available resources. The theory also identifies individual differences, observing that perceptions of effort, performance, and reward vary across people based on personal abilities, experience, and expectations.

In the context of Ugandan secondary schools, particularly under the competency based education reforms, the theory provides a framework to understand how teacher motivation affects the adoption and effectiveness of assessment practices. Expectancy refers to teachers' belief that their effort in preparing and administering assessments will result in effective performance, which is influenced by assessment literacy, pedagogical competence, classroom management skills, and exposure to teachers continuous professional development (TCPD) programs (Vroom, 1964). Instrumentality reflects the perceived connection between effective performance and desirable outcomes, such as improved learner engagement, competency acquisition, and recognition from school leadership, motivating teachers to implement formative and continuous assessment approaches (Vroom, 1964). Valence signifies the value teachers attach to these outcomes, including enhanced student performance, professional recognition, and career advancement, which strengthens their commitment to adopting innovative assessment practices (Vroom, 1964). By applying Vroom's theory, this study can explore how teacher motivation, shaped by TCPD and institutional support, mediates the implementation of effective assessment practices and eventually impacts learner outcomes. This framework links teacher capacity, motivational dynamics, and educational results, offering understandings into why some teachers adopt formative and continuous assessments while others rely on traditional summative assessments, and highlighting the critical role of professional development, supportive policy, and meaningful outcomes in enhancing curriculum delivery and assessment effectiveness in Gulu City secondary schools.

1.2.3 Conceptual Background

According to the Ministry of Education and Sports, assessment practices refer to systematic processes through which evidence is collected and evaluated to determine whether learners have met the stipulated standards (MoES, 2020).

According to NCDC, assessment practices under the competency based education are the methods and processes used to measure and monitor learners' acquisition of competencies, which include knowledge, skills, values, and attitudes. These practices involve continuous, formative, and summative assessments, as well as vocational/outcome-based assessments in certain subjects. Assessments are designed to be criterion-referenced meaning learners are evaluated against clearly defined standards rather than compared against other learners. Teachers are supported through assessment guides (evaluation grid), standard assessment items, and regular assignments/tests to assess competence regularly (NCDC, 2020).

Assessment according to Uganda National Examinations Board is the process of systematically gathering and evaluating information about learners' knowledge, skills, competencies, values, and attitudes through continuous, project-based, and end-of-cycle assessments. It involves both formative and summative processes to measure learner knowledge, skills, and competencies, providing feedback to improve learning and guide instructional decisions (UNEB, 2021; UNEB/NPA, 2023).

Black and Wiliam (2018) define assessment practices as the systematic collection, analysis, and interpretation of evidence regarding student learning, used to make informed decisions about instructional strategies and learner progression.

Brookhart (2018) describes assessment practices as the ongoing processes teachers use to evaluate student understanding, skills, and competencies, integrating both formative and summative approaches. Brookhart stresses that assessment should support learner development, motivation, and self-regulation, aligning with curriculum goals and competency based education principles.

In this study, assessment practices were measured by formative, continuous, and summative approaches to give sensitive understanding of the study.

According to the Ministry of Education and Sports (MoES) in Uganda, teachers' continuous professional development (TCPD) refers to the ongoing process by which teachers enhance their professional knowledge, skills, and competencies throughout their careers (MoES, 2020; MoES, 2022). This process is essential for improving teaching quality and, by extension, student learning outcomes (MoES, 2020; Okumu & Opio, 2023). The MoES has established frameworks and policies to guide and institutionalize TCPD, ensuring that it is systematic, standardized, and aligned with national educational goals (MoES, 2020; MoES, 2022).

Worku (2025) defines teachers' continuous professional development as a continuing process through which teachers improve their professional knowledge and teaching skills, with the purpose of strengthening instructional quality and enhancing students' learning outcomes.

Darling-Hammond et al. (2017) defines teachers' continuous professional development as a continuous process of learning and support that strengthens teachers' content knowledge, pedagogical skills, and professional collaboration, thereby enhancing their effectiveness in the classroom and contributing to improved student achievement.

In this study, TCPD can be defined as formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support, aimed at enhancing teachers' professional knowledge, pedagogical skills, and assessment competence.

1.2.4 Contextual Background

Uganda's transition to competency based education (CBE) aims to equip learners with practical skills, critical thinking, and problem-solving abilities. However, the country continues to face challenges in aligning assessment practices with these goals (MoES, 2020; Okumu & Opio, 2023). Nationally, the dominance of traditional examinations tends to emphasise memorisation over the demonstration and application of competencies, potentially contributing to disparities in learner outcomes and limiting opportunities for learners to develop essential practical skills (Ainomugisha, 2021; Atibuni & Muzaale, 2024). Limited teacher preparation in formative, continuous, and performance-based assessment further constrains the effective implementation of CBE and may affect the reliability and validity of assessment practices (MoES, 2020).

Regionally, in Northern Uganda, large class sizes, inadequate infrastructure, and limited resources may hinder the effective implementation of authentic competency based assessment practices. Cultural and institutional preferences for examination-oriented learning may also constrain the use of continuous, formative, and performance-based assessment approaches. These challenges may contribute to a mismatch between the intended objectives of CBE and the assessment practices implemented in schools (Wango, 2021; Kidega et al., 2024).

Locally, in Gulu City, insufficient teacher mentorship, weak feedback systems, and pressure to meet national examination requirements may encourage continued reliance on conventional

testing methods that do not fully capture learners' competencies. Reports of inconsistent use of continuous and performance-based assessment practices and limited feedback to learners further raise concerns about the extent to which assessment practices support the objectives of CBE (Okumu & Opio, 2023; Nakawuki et al., 2025; MoES, 2020; Atibuni & Muzaale, 2024). These challenges underscore the need to examine teachers' continuous professional development and its relationship with assessment practices in competency based education in secondary schools in Gulu City.

1.3 Problem Statement

Assessment practices are central to competency based education (CBE) because they enable teachers to assess learners' mastery of skills, application of knowledge, and development of values for lifelong learning (Stiggins, 2020; Black & Wiliam, 2020). However, despite the emphasis on formative and competency-based assessment, traditional summative examinations continue to dominate in many education systems globally. In Sub-Saharan Africa, inadequate teacher training further limits the adoption of innovative assessment approaches, with teacher training coverage estimated at 62% compared to the global average of 86% (UNESCO, 2023).

In Uganda, the 2020 transition to CBE was intended to promote continuous and learner-centred assessment (MoES, 2022). Nevertheless, more than 70% of secondary school teachers reportedly continue to rely heavily on summative examinations, partly because of inadequate teachers' continuous professional development (TCPD), limited assessment literacy, and insufficient instructional resources (Opio & Achen, 2021; Mugisha, 2021). In Gulu City, inadequate structured TCPD support and limited school resources may further constrain teachers' ability to implement effective assessment practices that develop and measure learners' creativity, critical

thinking, and practical competencies (Tusiime, 2022; Okumu & Opio, 2023). Therefore, there is a need to examine the relationship between teachers' continuous professional development (TCPD) and assessment practices (AP) in secondary schools implementing competency based education in Gulu City.

1.4.1 General Objective

To examine the relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City.

1.4.2 Specific Objectives

i. To assess the level of teachers' continuous professional development in competency based education in secondary schools in Gulu City.
ii. To examine the assessment practices in competency based education in secondary schools in Gulu City.
iii. To determine the relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City.

1.5 Research Questions

i. What is the level of teachers' continuous professional development in competency based education in secondary schools in Gulu City?
ii. What is the level of use of assessment practices in competency based education in secondary schools in Gulu City?

iii. What is the relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City?

1.6 Scope of the Study

1.6.1 Content Scope

The study was limited to secondary schools in Gulu City and focuses on competency based education (CBE). It analyzes teachers' assessment practices, examines their level of participation in continuous professional development (TCPD), and examine the relationship between TCPD and assessment practices. The scope excludes primary, tertiary, and vocational institutions and is confined only to assessment practices and TCPD within CBE.

1.6.2 Geographical Scope

The study was conducted in Gulu City, in Northern Uganda. It is approximately 337 km from Kampala, the Capital City of Uganda. It is bordered by Lamwo to the north, Kitgum to the northeast, Pader to the East, Omoro to the South, Amuru to the west, and Nwoya to the Southwest. Gulu's population is estimated to be 233,271 people in 2024 (UBOS, 2024).

1.6.3 Time Scope

The study focused on teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE) in secondary schools in Gulu City during the period 2020-2025. The selected period was considered appropriate because it coincided with the introduction, implementation, and consolidation of the competency based education in Uganda's secondary education system (MoES, 2022; NCDC, 2021). Specifically, the period 2020-2022 captured the initial phase of curriculum implementation, during which teachers underwent

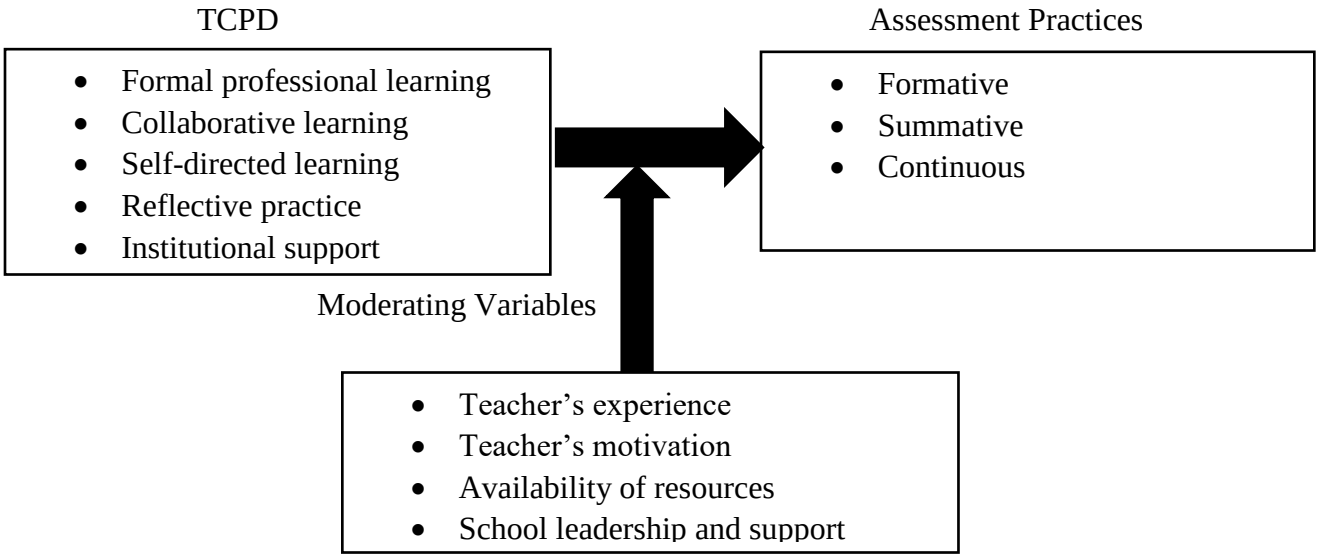
continuous professional development programmes aimed at equipping them with competency based pedagogical skills. The period 2023-2025 represented the consolidation phase, characterized by increased emphasis on assessment literacy, learner-centered teaching approaches, and the effective application of competency based assessment practices in schools (Okumu & Opio, 2023; Mugisha, 2021). Therefore, the period provided a suitable context for examining the relationship between TCPD and assessment practices under the competency based education framework in secondary schools in Gulu City.

1.7 Significance of the Study

The study provides valuable comprehensions to Ministry officials and other education stakeholders, particularly in guiding decisions aimed at enlightening the implementation, coordination, and management of teachers' continuous professional development in secondary schools, thereby enhancing service delivery to both teachers and learners. The findings also contribute to the existing body of literature on teachers' continuous professional development and assessment practices, providing a basis for further academic inquiry and research. In addition, the completion of this study fulfilled part of the requirements for the award of a Master of Education in Education Management and Administration at Gulu University. Furthermore, the findings are compared with those of existing studies in the discussion chapter, and areas of convergence and divergence help to identify knowledge gaps and provide direction for further research.

1.8 Conceptual Framework of the Study

This is the diagrammatical illustration of the assumed linkages and relationship between the Independent Variable and Dependent Variable (Herbaman & Herberman 1979).



Source: Adapted with modification from Vroom 1964.

Figure 1. 1: Conceptual Framework

The conceptual framework above shows the assumed relationship between teachers' continuous professional development and assessment practices in competency based education. The framework also shows the assumed impact of the moderating variables on the relationship between Teachers continuous professional development and assessment practices in CBE.

Chapter Two

Literature Review

2.0 Introduction

This chapter presents a review of literature, which was reviewed thematically according to the study's specific objectives. The objectives were: to assess the level of teachers' continuous professional development (TCPD), examine assessment practices used by teachers, and determine their relationship within competency based education (CBE) in secondary schools in Gulu City. The review explored existing scholarly works on TCPD and assessment practices to provide a foundation for the study. It included the theoretical and conceptual reviews, examines empirical studies conducted globally, regionally, and locally, and highlights gaps in the literature that the current study attempted to address.

2.1 Theoretical Review

2.1.1 Vroom's Expectancy Theory

The theoretical underpinning of this study was provided by Vroom's Expectancy Theory (1964), who posits that motivation is determined by the interaction of three interrelated components: expectancy, instrumentality, and valence. Expectancy refers to an individual's belief that increased effort will result in successful performance. Instrumentality is the belief that successful performance will lead to desired outcomes, and valence represents the value or importance an individual places on those outcomes (Vroom 1964). In essence, Vroom's Theory emphasizes that motivation is a function of how strongly an individual believes that effort will lead to performance, and that performance will produce outcomes they value (Vroom 1964).

In the context of teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE), this theory explains why teachers choose to engage with professional development programmes and apply learned knowledge in classroom practices. Teachers are more likely to adopt competency based assessment methods when they perceive that their effort in TCPD will not only improve instructional effectiveness but also enhance student learning outcomes and be recognized or rewarded by school leadership. For example, a teacher who believes that attending a workshop on designing performance-based assessments will improve classroom outcomes and lead to professional recognition is more likely to actively implement those assessment strategies (Vroom 1964).

A significant strength of Vroom's Theory is its capacity to clarify the motivational processes that underpin teacher engagement with TCPD. It establishes a clear link between effort, performance, and valued outcomes, making it particularly useful for understanding why some teachers actively implement CBE assessment practices following professional development. This insight is critical for designing TCPD programs that aim to enhance classroom assessment quality, as it identifies the psychological mechanisms that drive teacher behavior (1964).

However, the theory has limitations when applied to the context of semi-urban schools, such as those in Gulu City. Vroom primarily focuses on individual psychological factors, neglecting broader social, cultural, and environmental influences that significantly impact TCPD adoption. Teachers' motivation alone may not result in improved assessment practices if institutional support is lacking, resources are insufficient, or mentorship opportunities are absent. Empirical evidence reinforces this, suggesting that motivation must be complemented by structural and organizational support to translate into meaningful changes in classroom practices (Vroom 1964).

To maximize the relevance of Vroom's theory in TCPD programs, professional development initiatives must clearly demonstrate the link between teacher effort and classroom outcomes. This can be achieved by incorporating structured incentives, recognition mechanisms, and evidence of impact into training programs. For instance, providing teachers with follow-up coaching, opportunities to showcase improved assessment strategies, or acknowledgment of achievements can strengthen the expectancy-performance-outcome chain. Such measures ensure that motivation is effectively converted into practice, addressing both individual and contextual challenges in competency based education (Okumu & Opio, 2023).

Moreover, integrating vroom's framework with complementary theories such as social constructivist theory and social cognitivist theory can enhance understanding of TCPD adoption. While Vroom emphasizes motivation, social constructivist and social cognitivist frameworks highlight the role of collaboration, observation, and social learning. Together, these theories provide a comprehensive lens for designing professional development programs that consider both psychological and social factors influencing teacher engagement and implementation of competency based assessment practices (Vroom, 1964; Bandura, 1986; Vygotsky, 1978).

2.1.2 Social Constructivist Theory

Social Constructivist Theory, as articulated by Piaget (1951) and Vygotsky (1978), posits that learners actively construct knowledge rather than passively absorbing information. Piaget's cognitive constructivism emphasizes that learning occurs through interaction with the environment, where individuals adapt new experiences into existing cognitive structures and accommodate their understanding to integrate new knowledge. Piaget argued that learning is a sequential process occurring through distinct stages of cognitive development, with each stage

building on the previous one. In the context of teaching, Piaget's theory underscores the importance of providing learners with experiences that challenge their thinking, stimulate problem-solving, and encourage independent reasoning (Piaget, 1951; Vygotsky, 1978).

Vygotsky's Social Constructivism, on the other hand, stresses that knowledge is co-constructed through social interaction, language, and cultural tools. Learning occurs most effectively when learners collaborate with peers, teachers, and more knowledgeable others. The concept of the Zone of Proximal Development (ZPD) highlights that learners can achieve higher levels of understanding with guidance and scaffolding. In TCPD and CBE, this implies that teachers develop competence in assessment practices more effectively when engaged in collaborative learning communities, peer mentoring, reflective discussions, and shared problem-solving. Teachers who participate in such interactions are better able to adopt competency-based assessment practices, adapt teaching strategies to learners' needs, and improve overall instructional effectiveness (Vygotsky, 1978).

A major strength of the Constructivist Theory is its holistic approach, which integrates both individual cognitive development (Piaget) and social learning (Vygotsky). The theory encourages teachers to become reflective practitioners, promoting active engagement, critical thinking, and problem-solving in professional development programs. It also emphasizes that learning is meaningful when contextualized and situated within real-world teaching practices, making it highly applicable to designing TCPD programs that enhance competency-based assessment practices (Piaget, 1951; Vygotsky, 1978).

However, the theory has some limitations. Piaget's emphasis on individual cognitive development may oversee social and cultural influences, while Vygotsky's focus on collaborative learning may not fully account for individual differences such as prior knowledge,

self-efficacy, and motivation. In secondary schools in Gulu City, factors such as inadequate resources, large class sizes, limited mentorship, and school leadership support may constrain teachers' ability to apply constructivist principles and translate professional development into effective assessment practices. Thus, the theory is applied alongside the contextual conditions within which teachers work. Without institutional support and structured guidance, teachers may struggle to translate collaborative learning experiences into effective competency based assessment practices (Piaget, 1951; Vygotsky, 1978).

Empirical studies reinforce the relevance of constructivist theory to TCPD. Teachers engaged in collaborative workshops, peer observation, reflective practice, and mentoring programs demonstrate improved competence in implementing competency-based assessment methods. These studies indicate that constructivist approaches in TCPD lead to greater teacher engagement, improved instructional strategies, and enhanced student learning outcomes, particularly when professional development is ongoing and contextually relevant (Nabunya & Kasozi, 2021; Okumu & Opio, 2023).

2.1.3 The Social Cognitivist Theory

The Social Cognitivist Theory (2000), derived from the work of Albert Bandura, emphasizes that learning is a dynamic process occurring through observation, imitation, and modeling, with self-efficacy playing a central role in guiding behavior. According to the theory, individuals can acquire new knowledge and skills by observing the actions of others and noting the consequences of those actions. This approach highlights the reciprocal interaction between personal, behavioral, and environmental factors, meaning that learning is influenced not only by

what teachers know but also by the context in which they work and the feedback they receive (Bandura, 2000).

In the context of teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE), Social Cognitivist Theory explains how teachers develop competence in assessment practices by observing peers, mentors, and expert educators. Teachers who witness successful assessment techniques, receive feedback, and gain confidence in their abilities are more likely to implement competency based assessment strategies in their classrooms. Perhaps, a teacher observing a colleague conducting a performance based assessment or designing authentic tasks can replicate and adapt these methods, improving student engagement and learning outcomes (Bandura, 2000).

A major strength of Social Cognitivist Theory (2000) is its practical relevance to teacher learning and skill acquisition. It emphasizes the importance of observation, modeling, feedback, and reflective practice as key drivers of professional growth. This makes the theory particularly useful for designing TCPD programs that aim to enhance assessment practices, as it accounts for the mechanisms through which teachers internalize and apply new knowledge. Additionally, by incorporating self-efficacy, the theory highlights the critical role of teacher confidence in adopting innovative assessment methods (Bandura, 2000).

Despite its strengths, the theory has limitations. It focuses primarily on individual and social cognitive processes, often underestimating structural and contextual barriers such as limited resources, large class sizes, and socio-cultural factors prevalent in semi-urban schools like those in Gulu City. Teachers may observe best practices but fail to implement them effectively if institutional support, mentorship, or adequate materials are lacking. Furthermore, without

sustained guidance, the transfer of observed practices into meaningful classroom application may be inconsistent (Bandura, 2000).

Empirical studies support the application of social cognitivist theory to TCPD. For instance, teachers who participate in collaborative workshops, peer observations, and mentoring programs report increased confidence in designing competency based assessments and a higher likelihood of integrating these practices in classrooms (Mugisha, 2021; Namaganda & Okello, 2023). These studies reinforce the importance of combining observational learning with structured support and reflective activities to maximize the impact of TCPD initiatives.

Integrating Social Cognitivist Theory (Bandura, 2000) into TCPD design implies that professional development programs should include opportunities for observation, modeling of best practices, peer mentoring, structured feedback, and reflective exercises. By addressing both individual teacher capabilities and environmental factors, this theory complements motivational frameworks like Vroom's Expectancy Theory (Vroom, 1964) and collaborative approaches like social constructivist theory (Piaget, 1951; Vygotsky, 1978). Integrating constructivist theory into TCPD design requires that programs combine hands-on experiential learning, reflective practice, collaborative activities, and mentorship opportunities. Such an approach allows teachers to construct knowledge both individually and socially, reinforcing the application of new skills in classroom assessment practices. By addressing both cognitive and social dimensions of learning, constructivist theory complements motivational frameworks like Vroom's Expectancy Theory (Vroom, 1964), collaborative models like social Constructivist Theory (Piaget, 1951; Vygotsky, 1978), and observational learning approaches like social cognitivist theory (Bandura, 2000). Together, these theories provide a comprehensive framework for understanding teacher engagement, professional growth, and effective implementation of competency based assessment

practices in secondary schools. Collectively, these theories provide a comprehensive perspective for understanding teacher engagement, adoption, and effective implementation of competency based assessment practices (Bandura, 2000; Piaget, 1951; Vygotsky, 1978; Vroom, 1964).

2.2 The Level of Teachers' Continuous Professional Development (TCPD) in Secondary Schools

Okumu and Opio (2023) led an in-depth study on structured and reflective teacher continuous professional development workshops for secondary school teachers in Gulu City. The study involved 90 teachers across six schools, focusing on capacity building for implementing competency based education (CBE). Results indicated that 90% of teachers reported significant improvements in educational skills and assessment practices, particularly in designing competency based assessments. Pre- and Post-Workshop evaluations displayed a 28% increase in teachers' confidence and ability to conduct formative and continuous assessments effectively. Teachers also demonstrated improved collaboration during lesson planning and assessment moderation sessions, signifying a high level of engagement with TCPD initiatives (Okumu & Opio, 2023). The study however did not track long-term retention of acquired skills or the impact on student learning outcomes, limiting understanding of sustained TCPD effects.

Bakuza (2025) examined TCPD programs in secondary schools in Kampala, focusing on mentoring, collaborative lesson planning, and structured feedback. Data from 120 teachers across 10 schools indicated that those participating in comprehensive TCPD exhibited a 35% improvement in the implementation of competency based assessment strategies. Teachers reported increased use of portfolios, rubrics, and project-based assessments. Structured mentoring and continuous follow-up were mentioned as key factors for successful adoption,

highlighting that high-level TCPD contributes not only to teacher knowledge but also to classroom practice improvements (Bakuza, 2025). However, the study relied largely on teachers' self-reported data and did not incorporate classroom observations to verify the extent to which the reported assessment practices were actually implemented. This leaves a gap in understanding the relationship between TCPD participation and the practical application of competency based assessment strategies in classroom settings.

UNESCO (2022) reported on global TCPD initiatives for secondary school teachers, emphasizing high-quality, and sustained programs. Findings indicated that schools implementing continuous multi-session TCPD programs showed 25-30% improvements in teacher competency and Classroom assessment practices. Teachers participating in these programs reported enhanced skills in formative, summative, and continuous assessment methods. The report also highlighted that high level TCPD was associated with improved student engagement and higher achievement in competency based tasks (UNESCO, 2022). The report however gathered data globally and did not provide detailed analyses for specific countries or districts, making it difficult to apply findings directly to Gulu City secondary schools.

Mugisha et al. (2024) examined intensive TCPD programmes in Rwandan secondary schools, focusing on improving competency based assessment practices. The study included 150 teachers from 12 secondary schools who participated in year-long workshops involving mentoring, peer observation, and practical exercises. Findings showed a 32% improvement in assessment quality scores, alongside increased use of portfolios, project based assessments, and performance tasks. Teachers also reported improved confidence and competence in classroom assessment, suggesting that sustained and well-structured TCPD can enhance teachers' assessment practices in competency-based education. However, the study was conducted within Rwanda's education

system, where the institutional and professional support for TCPD may differ from that available in Uganda. Therefore, the findings may not fully explain how TCPD influences assessment practices under the contextual conditions of secondary schools in Gulu City, creating a need for the present study.

UNICEF Uganda (2023) implemented nationwide TCPD programs across 29 Districts, targeting secondary school teachers' skills in competency based education. Monitoring data showed that teachers fully engaged in high level professional development increased their use of formative and continuous assessment techniques by 33%, including rubrics, project based evaluations, and learner portfolios. Teachers reported greater confidence in assessing learners' practical and cognitive competencies, and classrooms revealed improved alignment between teaching and assessment practices. High level TCPD interventions highlighted mentorship, follow-up coaching, and collaborative lesson planning as crucial factors in improving teacher performance (UNICEF Uganda, 2023). However, the study collected results at the national level and did not disaggregate data for Gulu City, limiting understandings into local variations in TCPD effectiveness.

Ochieng (2023) examined TCPD initiatives where workshops were irregular, underfunded, and inconsistently attended across 70 secondary schools in Kenya. Only 40% of teachers reported minor improvements in classroom assessment practices, mainly through slightly more frequent quizzes and informal feedback sessions. Classroom observations revealed minimal integration of competency based portfolios or performance tasks. While some teachers united peer assessment, overall changes were limited, and student outcomes remained largely unchanged. The study highlighted that moderate improvements occur when TCPD is implemented without strong institutional support, follow-up, or mentoring (Ochieng, 2023). The study did not analyze

systemic factors in-depth, such as administrative support or resource availability, and lacked quantitative measures of student competency gains.

Abworo and Lutaaya (2024) investigated the effects of irregular TCPD workshops on competency based assessment in rural districts of Uganda, involving 60 teachers across 5 schools. Teachers reported a 5-7% improvement in assessment practices, mostly limited to short tests rather than full competency based portfolios or practical tasks. Limited mentorship and follow-up support contributed to weak adoption of competency based education (CBE) principles. The study emphasized that teachers in rural areas face structural challenges, including resource scarcity, high student-teacher ratios, and limited access to continuous professional development opportunities (Abworo & Lutaaya, 2024). The study was small-scale, lacked classroom observation data, and did not include student performance metrics, limiting the generalizability of findings.

Kizza (2023) evaluated one-off TCPD workshops conducted for secondary school teachers across three districts in Uganda. Results showed minimal adoption of competency based assessment practices, with teachers achieving only 5-8% improvement in using portfolios, peer assessments, or performance based tasks. Teachers cited lack of sustained mentoring, insufficient resources, and high workload as key barriers. The study highlighted that brief TCPD interventions can produce some knowledge gains, but these do not consistently translate into significant classroom practice improvements (Kizza, 2023). The study did not include longitudinal follow-up to assess whether initial gains in teacher knowledge led to eventual improvements in student competency outcomes.

Mwangi and Wanjiru (2022) studied online TCPD modules aimed at enhancing secondary school teachers' CBE assessment skills in Kenya. 100 teachers participated in digital training for over 3 months. Findings indicated a 10% improvement in the use of competency based assessments, particularly in formative evaluation tasks such as project work and peer assessment. However, lack of in-person follow-up and peer mentoring limited the depth and sustainability of adoption. Teachers reported difficulties translating digital content into practical classroom strategies, particularly in large classes with limited teaching resources (Mwangi & Wanjiru, 2022). The study lacked classroom observation and student outcome measures, and it did not explore challenges related to ICT access, which may affect applicability in low-resource contexts like Gulu City.

Nabukenya (2023) conducted a regional survey of TCPD participation among 85 secondary school teachers in Northern Uganda, focusing on formative assessment integration. Results showed approximately 9% improvement in the use of competency based assessment tasks after TCPD workshops. Teachers with less prior exposure to competency based education principles gained more from the training than those with extensive experience. Observations indicated partial implementation of performance tasks and peer assessment activities, while traditional written tests remained dominant. The study highlighted the importance of follow-up support and coaching to achieve stronger adoption of competency based assessment practices (Nabukenya, 2023). The study was cross-sectional and did not include long term tracking of student learning outcomes, limiting conclusions about the sustained impact of TCPD on assessment practices.

Abila and Omondi (2022) examined teacher continuous professional development (TCPD) programs in secondary schools that were poorly resourced and irregularly conducted across 50 schools in Kenya. Findings indicated that only 15-20% of teachers reported any noticeable

improvement in classroom assessment practices. Most changes involved minor adjustments such as slightly more frequent quizzes, while authentic competency based assessments like portfolios, peer assessments, and performance tasks remained largely absent. Classroom observations confirmed minimal integration of competency based education principles. The study concluded that without sustained mentoring, proper resourcing, and institutional support, TCPD has a very weak impact on improving teachers' assessment practices (Abila & Omondi, 2022). The study did not explore underlying systemic barriers comprehensively, such as administrative support, teacher workload, or policy enforcement, limiting the understanding of causes behind weak TCPD impact.

Tumuhaise (2023) investigated TCPD workshops in rural Ugandan districts, focusing on competency based assessment adoption among 65 teachers. The research revealed that irregular and inconsistent TCPD sessions led to only 3-5% improvement in teachers' assessment practices. Most teachers continued to rely on traditional written tests, with minimal use of continuous assessment, portfolios, or performance tasks. Teacher-reported barriers included lack of mentorship, high student-teacher ratios, and insufficient instructional materials (Tumuhaise, 2023). The study was limited to rural districts, lacked quantitative student outcome data, and did not explore strategies to enhance TCPD effectiveness in resource-constrained settings.

Ssenyonjo (2022) examined TCPD interventions in Gulu City secondary schools, particularly focusing on the adoption of competency based education assessment practices. Despite participation in workshops, teachers demonstrated only 4% improvement in integrating formative and performance-based assessments. Observations revealed persistent reliance on teacher-centered examinations and limited use of portfolios or competency based rubrics. High teacher workload, lack of follow-up, and insufficient instructional resources were identified as

major constraints (Ssenyonjo, 2022). The study was cross-sectional and did not measure long-term teacher or student outcomes, limiting insights into whether weak TCPD could gradually improve with sustained support.

Kato (2023) evaluated the effectiveness of TCPD workshops without mentorship support in five secondary schools in Uganda. The study found limited improvement in teachers' competency based assessment practices, with changes largely mirrored in basic practices such as brief quizzes and oral questioning rather than more comprehensive approaches such as portfolios, project-based assessment, and continuous monitoring. The findings further showed that limited institutional follow-up and professional guidance constrained the sustained application of skills acquired through the workshops. However, the study was conducted on a small scale and did not examine how contextual factors such as school leadership, administrative policies, and availability of resources might influence the relationship between TCPD and assessment practices. This leaves a gap that the present study addresses by examining TCPD and assessment practices alongside contextual factors in secondary schools in Gulu City.

World Bank Uganda (2022) reported on TCPD initiatives in rural secondary schools, focusing on competency based assessment adoption. Findings indicated that teacher participation was inconsistent, and only a small fraction (3-5%) integrated competency based assessments such as performance tasks or portfolios into classroom practice. Most teachers continued using traditional summative tests. Observations highlighted weak institutional support, resource scarcity, and insufficient follow-up from trainers as primary barriers (World Bank Uganda, 2022). The report provided descriptive data without in-depth classroom observation or student outcome measures, limiting detailed understanding of the mechanisms behind weak TCPD impact.

2.3 Assessment Practices in Competency Based Education in Secondary Schools in Gulu City

2.3.1 Continuous Assessment Practices

Black and Wiliam (2018) examined the relationship between classroom assessment and pedagogy, emphasising the importance of integrating formative assessment into teaching and learning. Their analysis showed that assessment can contribute to improved learning when teachers use evidence of learners' understanding to adjust instruction and provide appropriate feedback. The authors further emphasised that formative and summative assessment can be connected in ways that support both classroom learning and the validity of formal assessment. However, the study was primarily theoretical and drew considerably on established assessment research rather than examining the implementation of continuous assessment in Ugandan secondary schools. Therefore, it provides a strong conceptual basis for understanding assessment practices but leaves a contextual gap regarding how such practices are implemented within the resource, institutional, and professional conditions of secondary schools in Gulu City.

The findings may not fully apply to low-resource settings like Gulu City, where teacher workload and infrastructure differ.

Kitta and Tilya (2021) examined the implementation of continuous assessment under Tanzania's competency based education in 45 secondary schools. Using a mixed-methods design involving 550 teachers, the study found that 67% of teachers struggled to conduct continuous assessments consistently due to large class sizes. Despite these constraints, schools that applied weekly assessments observed a 15-20% increase in learner mastery of competencies compared to schools that assessed only at the end of units. The study revealed that teachers who received in-

service training were 2.3 times more likely to use continuous tasks such as portfolios, project work, and short assessments (Kitta & Tilya, 2021). The study did not explore differences between rural and urban contexts or how community resource variations influence continuous assessment effectiveness.

The association for the development of education in Africa (ADEA, 2022) analyzed continuous assessment adoption across 12 African countries transitioning to competency based education. The report indicated that countries with structured assessment guidelines (e.g., Rwanda, Kenya) achieved 35-50% higher teacher compliance in implementing continuous assessment than countries without clear frameworks. Evidence from Rwanda showed that continuous assessment accounted for up to 60% of learner progression decisions, improving transparency in grading. However, the report also revealed that 42% of teachers across the continent lacked adequate training on developing competency-based assessment tools (ADEA, 2022). The study was broad and comparative, lacking country-specific depth, and did not focus on localized teacher challenges such as workload in smaller regions like Gulu City.

The National Curriculum Development Centre (NCDC, 2020) examined the early implementation of Uganda's competency based education, with emphasis on continuous assessment. Its pilot study in 34 districts revealed that only 38% of teachers could design valid competency based assessments. The study further found that schools implementing continuous assessment effectively recorded a 28% improvement in learners' project performance, particularly in STEM subjects. Teachers also reported that ongoing assessment enabled them to identify struggling learners earlier and provide targeted support interventions. In addition, continuous assessment was associated with a 45% increase in learner participation in practical tasks (NCDC, 2020). These findings show that effective continuous assessment can support

learner participation, early identification of learning difficulties, and improved performance. However, the findings were offered at a national level without disaggregating the results by region or city, leaving unclear how continuous assessment was being implemented in secondary schools in Gulu City. This contextual gap justified the need for the present study.

Okech and Mugisha (2023) carried out a regional assessment of continuous assessment practices across 23 secondary schools in Northern Uganda, including Gulu City. Their findings from 312 teachers showed that only 29% consistently used portfolios, yet continuous assessment improved learner competency demonstration by 18% in schools where it was implemented effectively. Teachers cited lack of training and heavy workloads as major limitations, with 64% reporting difficulty in designing weekly assessment activities (Okech & Mugisha, 2023). The study also revealed that continuous assessment was more effective in urban schools where teacher-learner ratios were lower. The study did not examine how school leadership practices influence teacher ability to implement continuous assessment consistently.

Akena (2024) studied continuous assessment implementation in four Gulu City secondary schools transitioning to CBE. Using classroom observations and teacher interviews, the study found that teachers who engaged in peer-collaborative planning produced higher-quality assessment tasks. Schools that integrated continuous assessment into weekly lesson plans recorded a 26% increase in learner competency scores compared with schools that assessed learners only at the end of each topic. The study also found that 72% of teachers reported insufficient instructional materials, which constrained their ability to conduct practical assessments effectively. Learners further reported that continuous assessment improved their understanding of learning expectations and performance criteria (Akena, 2024). These findings suggest that effective continuous assessment, supported by collaborative planning and adequate

instructional materials, can enhance the quality of assessment tasks and learners' competency development. However, the study was conducted in only four schools, limiting the extent to which its findings could represent the wider population of secondary schools in Gulu City. The present study therefore sought to examine continuous assessment practices across a broader range of secondary schools in the city.

2.3.2 Formative Assessment Practices

Schildkamp et al. (2020) conducted a systematic review of 87 studies evaluating formative assessment implementation in secondary schools across 15 countries. Their findings indicated that formative assessment positively influenced student learning outcomes, with reported improvements ranging from 15-30% in test scores where teachers used assessment data to guide instruction. The review stressed basics for effectiveness, including teacher assessment literacy, manageable class sizes, and institutional support. Additionally, schools using structured rubrics and feedback cycles reported higher student engagement and better competency attainment. (Schildkamp et al., 2020). Despite creating global evidence, only 5 studies were from Sub Saharan Africa, highlighting a lack of context-specific empirical research for low-resource secondary school environments, particularly Uganda.

UNICEF Uganda implemented teacher professional development programs in 29 districts, focusing on competency based formative assessment. Monitoring reports indicated that 63% of trained teachers increased the use of formative assessment Techniques such as questioning, in-class activities, and short quizzes. Schools that adopted these practices observed a 12-18% increase in student engagement and participation in class activities, according to program observation checklists. Teachers reported that formative assessment allowed early identification

of learning gaps, enabling targeted interventions for struggling learners (UNICEF Uganda, 2023). These program reports were largely descriptive and process-oriented, with limited difficult evaluation of impact on student competency outcomes or long-term learning gains.

Nakawuki et al. (2025) examined 212 lower secondary teachers in Mpigi district to assess their knowledge and use of formative assessment tools under competency based education. Results showed that only 31% of teachers consistently used rubrics or documented feedback, while 46% relied primarily on oral questioning. Classrooms where formative assessment was practiced consistently showed an average 14% improvement in student performance in competency based Tasks. The study highlighted that teacher training and understanding with assessment rubrics were significant predictors of effective formative assessment (Nakawuki et al., 2025). The study was cross-sectional and focused on a single district. It did not include experimental or longitudinal components to determine whether improving teacher knowledge would directly lead to measurable improvements in student competencies over time.

Osorio-Vanegas et al. (2025) conducted a systematic review of 72 studies on technology-facilitated formative assessment in secondary schools. Evidence suggested that digital tools such as e-portfolios, online quizzes, and learning analytics platforms improved formative assessment reliability, with up to 20% faster feedback cycles and 15-25% improvements in learning outcomes when teachers effectively integrated these technologies. The review highlighted that ICT-enabled formative assessment allowed richer tracking of student competency development and facilitated timely adjustments in instruction. Most primary studies originated from high- or middle-income countries (Osorio-Vanegas et al., 2025). There was limited applicability for low-tech schools, common in Uganda, and minimal evidence on practical alternatives for contexts with limited digital infrastructure.

Atibuni et al. (2024) analyzed formative assessment practices across 34 Ugandan districts, sampling 450 teachers. Findings revealed that while 78% of schools conceptually supported formative assessment, only 36% maintained proper documentation of learner progress, such as portfolios or task matrices. Schools that followed structured formative processes saw a 17% increase in student competency scores, particularly in STEM subjects. The report stressed that teacher adherence to formative principles and consistent record-keeping were critical to successful competency based education (Atibuni et al., 2024). The study provided broad national understandings but did not disaggregate results for specific regions like Gulu City. Additionally, it did not explore the link between teacher practices and student competency outcomes at the district level, leaving a gap for localized research.

2.3.3 Summative Assessment Practices

Van der Vleuten et al. (2005) examined programmatic assessment frameworks for competency evaluation in professional education worldwide. They argued that summative assessments based on a single high-stakes test are often insufficient for reliably measuring competencies. Drawing from 40 institutional case studies, the authors showed that integrating multiple assessment modalities; portfolios, practical tasks, and structured exams resulted in 20-30% more accurate competency judgments. The research emphasized the need for systematic aggregation and moderation of results to ensure validity. Programmatic assessment also improved learner progression monitoring and allowed targeted remediation before summative certification (Van der Vleuten et al., 2005). However, most examples come from higher education and professional programs with extensive resources; the findings may not directly translate to resource-limited secondary school systems in Uganda.

Kidega (2024) conducted a qualitative study of summative assessment practices in four Gulu City secondary schools under competency based education. Interviews with 50 teachers and administrators revealed that national exam pressures led to “teaching to the test,” narrowing curricula and reducing competency based tasks. Observations indicated that summative assessments were dominated by lower-order recall questions, with minimal use of portfolios or performance tasks. Teachers reported that this practice affected student engagement and limited opportunities for higher-order skill development. The study highlighted the tension between national summative exams and local competency based objectives (Kidega, 2024). The study is descriptive and small-scale; it does not provide quantitative analysis of student achievement or item-level evaluation to measure the validity of summative tasks in capturing competencies.

UNEB monitoring reports traced summative assessment practices across 200 secondary schools in Uganda. The findings showed that 68% of schools relied heavily on written examinations, while only 22% incorporated practical or project-based tasks. In schools that attempted performance-based assessment, moderation was inconsistently applied, resulting in score variations of 10-15% across classes. The reports further showed that, although national policies encourage the integration of continuous and performance-based evidence into summative assessment, inadequate enforcement and limited teacher capacity remain challenges. These findings suggest that summative assessment in many schools continues to rely predominantly on written examinations, with limited and inconsistently moderated use of practical and performance-based approaches. The monitoring reports therefore emphasised the need for continuous professional development to strengthen teachers’ capacity and improve the reliability of summative assessment (UNEB, 2023). However, the reports were largely descriptive and policy-oriented and did not empirically examine the relationship between assessment practices

and learner competency outcomes. They also did not specifically examine secondary schools in Gulu City, leaving a contextual gap that the present study sought to address.

Oyoo (2024) evaluated competency based summative assessment in 12 Kenyan secondary schools, including performance task integration alongside conventional exams. The study involved 312 teachers and 1,250 students and reported that schools applying portfolios and moderated tasks achieved 18-22% higher alignment between assessed competencies and actual student skills. Teachers noted challenges in moderation and comparability of scores, and large class sizes limited implementation reliability. The study provided lessons for other East African countries, including Uganda, in piloting competency based summative reforms (Oyoo, 2024). While informative, the study was conducted in Kenyan schools with slightly different examination systems and administrative support, which limits direct generalization to Gulu City secondary schools.

2.4 Relationship between Teachers' Continuous Professional Development (TCPD) and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City

Bakuza (2025) examined the effects of structured teachers' continuous professional development (TCPD) programs on assessment practices in secondary schools implementing competency based education (CBE) in Kampala. The study involved 120 teachers across 10 schools who participated in mentoring, collaborative lesson planning, and systematic feedback sessions over a 12-month period. Findings revealed that teachers who engaged in these structured TCPD interventions demonstrated a 35% improvement in the alignment of classroom assessments with competency frameworks. Observations showed increased use of portfolios, rubrics, and performance-based tasks, with students achieving higher scores on applied tasks and problem-solving activities. Teachers reported enhanced confidence in implementing CBE-aligned

assessments and greater ability to provide constructive, timely feedback to learners. The study concluded that comprehensive TCPD significantly strengthens teachers assessment practices, especially when mentorship and collaborative planning are integrated (Bakuza, 2025). The study focused solely on Kampala, leaving uncertainty about TCPD effectiveness in semi-urban or rural contexts such as Gulu City, where teacher experience, resource availability, and institutional support differ.

Okumu and Opio (2023) evaluated reflective TCPD workshops targeting secondary school teachers' capacity to implement CBE-aligned assessment strategies in Gulu City. The study involved 90 teachers across six schools who participated in structured workshops emphasizing assessment design, performance tasks, and continuous feedback. Pre- and post-intervention analyses indicated a 28% improvement in the use of formative and continuous assessment strategies, including project based tasks and classroom observation. Teachers reported increased academic confidence and enhanced collaboration in lesson planning. The study also found that learners in classrooms of trained teachers exhibited improved clarity on assessment criteria and increased engagement in competency based tasks, demonstrating that targeted TCPD positively impacts both teacher practice and learner outcomes. (Okumu & Opio, 2023). The study did not track long-term retention of skills or whether these improvements translated into sustained student learning outcomes beyond the immediate post-intervention period.

Mugisha et al. (2024) investigated the impact of intensive TCPD programs on competency based assessment practices in Rwandan secondary schools. The study involved 150 teachers from 12 schools, who participated in a year-long series of workshops with mentoring, peer observation, and practical assessment exercises. Results indicated that teachers significantly enhanced their ability to design, administer, and interpret competency based assessments, achieving a 32%

improvement in assessment quality scores. Additionally, classrooms where TCPD was implemented showed measurable gains in student performance, with average competency scores rising by 18% in mathematics and sciences. The study highlighted that sustained, hands-on TCPD interventions were critical for improving both teacher skills and learner outcomes under CBE frameworks (Mugisha et al., 2024). Despite strong findings, the study was conducted in Rwanda, which has stronger systemic support and policy enforcement compared to Uganda; transferability to Gulu City may require contextual adaptation.

Kibwana and Mboya (2022) assessed the effectiveness of multi-session TCPD workshops on teacher competency and assessment practices in Kenyan secondary schools. The study involved 130 teachers from 15 schools, who received comprehensive training on portfolio use, performance assessments, and moderation of competency based tasks. Post-intervention evaluations showed a 30% increase in the use of authentic assessment methods, including peer-assessment, project-based tasks, and continuous monitoring of learner competencies. Teachers reported increased confidence and perceived professional growth, while student engagement and participation in practical activities improved significantly. The study concluded that structured TCPD with iterative workshops and peer collaboration strengthens teachers' ability to implement CBE-based assessment practices effectively (Kibwana & Mboya, 2022). The study was limited to Kenyan schools with moderate resources; findings may not directly translate to low-resource contexts such as semi-urban or rural secondary schools in Gulu City.

UNICEF Uganda (2023) employed nationwide TCPD programmes to enhance teachers' CBE assessment skills across 29 districts, involving over 450 teachers in training and follow-up support. Monitoring data indicated that teachers who fully engaged in TCPD increased their use of formative and continuous assessment techniques by 33%, including rubrics, project-based

evaluations, and learner portfolios. Schools also reported greater alignment between assessment practices and competency frameworks, together with improvements in learner participation and demonstration of competencies. The programme emphasised mentorship, follow-up coaching, and collaborative planning, which contributed to the effective application of assessment skills acquired through TCPD. Teachers further reported increased confidence in assessing learners' practical and cognitive competencies effectively (UNICEF Uganda, 2023). These findings suggest that sustained TCPD supported by mentorship and follow-up can strengthen teachers' application of competency-based assessment practices. However, although the programme covered multiple districts, the monitoring data were aggregated nationally and did not provide detailed evidence for specific urban centres such as Gulu City. Consequently, the localized impact of TCPD on teachers' assessment practices in Gulu City remained unclear, creating a gap addressed by the present study.

Jeptepkeny and Keter (2025) investigated the influence of TCPD programs on secondary school teachers' competency based assessment practices in Kenya. The study involved 110 teachers across 8 schools who attended structured workshops on designing and implementing competency based assessment tasks. Results indicated that 75% of teachers successfully integrated portfolios, performance tasks, and rubrics into classroom assessment. Student engagement improved moderately, and test scores showed an average 12-15% increase in competency demonstration. Teachers reported increased confidence in assessing higher-order skills, particularly in STEM subjects, highlighting that structured TCPD can enhance classroom assessment practices even when resources are moderately constrained (Jeptepkeny & Keter, 2025). The study relied heavily on self-reported data and limited classroom observations, making it difficult to validate the extent of actual changes in assessment practices.

Ebwalu and Tanda (2024) examined how teacher engagement and attendance influenced TCPD effectiveness in relation to competency based assessment practices in the Teso sub-region. The study involved 92 teachers, with absenteeism recorded at 30%, which affected full participation in TCPD workshops. The findings showed that schools where teachers fully engaged in TCPD recorded a 20% improvement in the adoption of formative and continuous assessment practices. Teachers also reported an enhanced understanding of competency based assessment frameworks, while learners demonstrated increased participation in practical tasks. These findings suggest that teacher engagement and regular participation in TCPD are important for translating professional development into improved assessment practices. The study therefore emphasised teacher engagement as a critical factor in realising the potential of TCPD to strengthen competency based assessment practices (Ebwalu & Tanda, 2024). However, the study focused primarily on attendance and engagement measures and did not examine the direct effects of TCPD on learner competency outcomes or the quality of assessment tasks. This leaves a gap in understanding whether increased teacher participation in TCPD translates into improved assessment quality and learner competency growth.

Okello and Namutebi (2023) examined the relationship between teachers' participation in continuous professional development and assessment practices among 200 teachers in Northern Uganda. The findings showed that teachers who participated in workshops reported moderate improvements of 10-12% in implementing competency based assessment practices, including observation-based tasks and project work. Less experienced teachers appeared to benefit more from the professional development activities than their more experienced counterparts, suggesting that prior knowledge and pedagogical exposure may influence the effectiveness of TCPD. Observational data further indicated partial adoption of portfolios and performance based

assessments, highlighting the potential for improved implementation through sustained professional support and follow-up (Okello & Namutebi, 2023). However, the study relied largely on self-reported and survey data and did not triangulate the findings through structured classroom observations or student performance measures. This constraint leaves a methodological gap that the present study seeks to address through the use of multiple data collection methods.

Mukasa (2022) studied the effectiveness of short-term TCPD workshops on secondary school teachers' ability to implement formative and summative competency based education assessment strategies. The study included 85 teachers across 7 schools and found that training led to an 8-10% increase in the adoption of competency based assessments, such as portfolios, peer assessments, and practical tasks. Teachers reported that while the workshops enhanced their knowledge, limited follow-up and mentoring reduced the overall impact on classroom practice. The study highlighted that short-term, one-off TCPD programs can yield moderate improvements but require sustained support for maximum effectiveness (Mukasa, 2022). The study however did not examine the long-term sustainability of improved assessment practices or the translation into student competency gains.

The World Bank (2023) reported on TCPD initiatives across East Africa, focusing on secondary school teachers' adoption of competency based assessment practices. Data from over 400 teachers in Uganda, Kenya, and Tanzania showed 18-22% improvement in classroom assessment practices after participation in structured TCPD workshops. Teachers reported increased confidence in implementing performance-based tasks, formative assessments, and portfolios. The report emphasized that multi-session TCPD programs combined with follow-up coaching led to stronger improvements in teacher practices compared to one-off workshops. Student engagement

also improved, as evidenced by increased participation in project-based tasks (World Bank, 2023). The report collected data across multiple countries and did not provide detailed, location-specific analysis for Gulu City, limiting the understanding of TCPD effectiveness in a local context.

Ochieng (2023) examined TCPD initiatives where workshops were irregular, underfunded, and inconsistently attended across 70 secondary schools in Kenya. Only 40% of teachers reported minor improvements in classroom assessment practices, mainly through slightly more frequent quizzes and informal feedback sessions. Classroom observations revealed minimal integration of competency based portfolios or performance tasks. While some teachers incorporated peer assessment, overall changes were limited, and student outcomes remained largely unchanged. The study highlighted that moderate improvements occur when TCPD is implemented without strong institutional support, follow-up, or mentoring (Ochieng, 2023). The study did not analyze systemic factors in-depth, such as administrative support or resource availability, and lacked quantitative measures of student competency gains.

Abworo and Lutaaya (2024) examined the effects of irregular TCPD workshops on competency based assessment practices in rural districts of Uganda, involving 60 teachers across five schools. The findings showed a 5-7% improvement in assessment practices, although the changes were largely limited to the use of short tests rather than comprehensive competency based approaches such as portfolios and practical tasks. The study further found that limited mentorship and follow-up support contributed to weak adoption of CBE principles. Teachers in the rural schools also faced structural challenges, including inadequate resources, high student-teacher ratios, and limited access to continuous professional development opportunities (Abworo & Lutaaya, 2024). These findings suggest that the effectiveness of TCPD depends not only on teachers'

participation in professional development but also on the availability of adequate resources, mentorship, and follow-up support. However, the study was small-scale, lacked classroom observation data, and did not include learner performance measures, limiting the generalisability of its findings. It therefore remains unclear whether similar challenges and patterns of TCPD effectiveness occur in secondary schools in Gulu City.

Kizza (2023) evaluated one-off TCPD workshops conducted for secondary school teachers across three districts in Uganda. Results showed minimal adoption of competency based assessment practices, with teachers achieving only 5-8% improvement in using portfolios, peer assessments, or performance-based tasks. Teachers cited lack of sustained mentoring, insufficient resources, and high workload as key barriers. The study highlighted that brief TCPD interventions can produce some knowledge gains, but these do not consistently translate into significant classroom practice improvements (Kizza, 2023). The study did not include longitudinal follow-up to assess whether initial gains in teacher knowledge led to eventual improvements in student competency outcomes.

Mwangi and Wanjiru (2022) studied online TCPD modules aimed at enhancing secondary school teachers' CBE assessment skills in Kenya. The study involved 100 teachers who participated in digital training over three months. Findings indicated a 10% improvement in the use of competency-based assessment practices, particularly formative assessment tasks such as project work and peer assessment. However, the absence of in-person follow-up and peer mentoring limited the depth and sustainability of adoption. Teachers also reported difficulties in translating digital content into practical classroom strategies, particularly when teaching large classes with limited resources (Mwangi & Wanjiru, 2022). These findings suggest that online TCPD can improve teachers' use of competency-based assessment practices, but its effectiveness may be

strengthened by follow-up support, peer mentoring, and adequate teaching resources. However, the study lacked classroom observation and learner outcome measures and did not examine challenges related to ICT access. Consequently, its findings provide limited evidence on how online TCPD translates into classroom assessment practices in low-resource contexts such as secondary schools in Gulu City.

Nabukenya (2023) conducted a regional survey of TCPD participation among 85 secondary school teachers in Northern Uganda, focusing on formative assessment integration. Results showed approximately 09% improvement in the use of competency based assessment tasks after TCPD workshops. Teachers with less prior exposure to competency based education principles gained more from the training than those with extensive experience. Observations indicated partial implementation of performance tasks and peer-assessment activities, while traditional written tests remained dominant. The study underscored the importance of follow-up support and coaching to achieve stronger adoption of competency based education assessment practices (Nabukenya, 2023). The study was cross-sectional and did not include long-term tracking of student learning outcomes, limiting conclusions about the sustained impact of TCPD on assessment practices.

Abila and Omondi (2022) examined TCPD programs in secondary schools that were poorly resourced and irregularly conducted across 50 schools in Kenya. Findings indicated that only 15-20% of teachers reported any noticeable improvement in classroom assessment practices. Most changes involved minor adjustments such as slightly more frequent quizzes, while authentic competency based assessments like portfolios, peer assessments, and performance tasks remained largely absent. Classroom observations confirmed minimal integration of competency based education principles. The study concluded that without sustained mentoring, proper

resourcing, and institutional support, TCPD has a very weak impact on improving teachers' assessment practices (Abila & Omondi, 2022). The study did not explore underlying systemic barriers comprehensively, such as administrative support, teacher workload, or policy enforcement, limiting the understanding of causes behind weak TCPD impact.

Tumuhaise (2023) explored TCPD workshops in rural Ugandan districts among 65 teachers. Findings showed only a 3-5% improvement in assessment practices, with most teachers continuing to rely on traditional written tests and making limited use of continuous assessment, portfolios, and performance tasks. Key barriers included inadequate mentorship, high student-teacher ratios, and insufficient instructional materials. These findings suggest that irregular TCPD without adequate support has limited influence on classroom assessment practices (Tumuhaise, 2023). However, the study focused exclusively on rural schools, whose resource, staffing, and professional support conditions may differ from those in Gulu City. Thus, its findings may not fully explain TCPD effectiveness in Gulu City secondary schools.

Ssenyonjo (2022) assessed TCPD interventions in Gulu City secondary schools, particularly focusing on the adoption of competency based education assessment practices. Despite participation in workshops, teachers demonstrated only 4% improvement in integrating Formative and performance based assessments. Observations revealed persistent reliance on teacher-centered examinations and limited use of portfolios or competency based rubrics. High teacher workload, lack of follow-up, and insufficient instructional resources were identified as major constraints Ssenyonjo, 2022). The study emphasized that weakly implemented TCPD, even in urban contexts like Gulu City, has minimal impact on enhancing assessment practices. The study was cross-sectional and did not measure long-term teacher or student outcomes, limiting insights into whether weak TCPD could gradually improve with sustained support.

Kato (2023) evaluated the effectiveness of TCPD workshops without mentorship support in five secondary schools in Uganda. Results showed only 2-6% improvement in teachers' competency-based assessment practices. Teachers mainly adopted limited changes, such as brief quizzes and oral questioning, rather than fully implementing portfolios, project based assessments, or continuous monitoring. Lack of institutional follow-up and limited professional guidance were identified as key factors inhibiting deeper adoption (Kato, 2023). These findings propose that the benefits of TCPD may be limited when teachers do not receive structured mentoring, professional guidance, and follow-up support to apply newly acquired assessment skills in their classrooms. The study was small-scale, with limited teacher and student samples, and did not assess whether external factors such as administrative policies or availability of resources could influence TCPD outcomes.

World Bank Uganda (2022) reported on TCPD initiatives in rural secondary schools, focusing on competency based assessment adoption. Findings indicated that teacher participation was inconsistent, and only a small fraction (3-5%) integrated competency based assessments such as performance tasks or portfolios into classroom practice. Most teachers continued using traditional summative tests. Observations highlighted weak institutional support, resource scarcity, and insufficient follow-up from trainers as primary barriers. The report concluded that TCPD in poorly resourced rural settings, when irregular and unsupported, has very limited impact on enhancing assessment practices under competency based education frameworks (World Bank Uganda, 2022). The report provided descriptive data without in-depth classroom observation or student outcome measures, limiting detailed understanding of the mechanisms behind weak TCPD impact.

Chapter Three

Methodology

3.1 Introduction

This chapter describes the research methodology employed in the study and explains the systematic procedures adopted to examine the relationship between teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE) in secondary schools in Gulu City. The chapter presents the research design, research approach, study area, target population, sampling procedures, sample size, data collection methods, data collection instruments, validity and reliability measures, data collection procedures, data analysis techniques, and ethical considerations.

3.2 Research Approach

The study adopted a mixed methods approach, integrating quantitative and qualitative approaches to provide a comprehensive understanding of the research problem (Bazeley, 2024; Guetterman et al., 2024). The quantitative component utilised structured questionnaires to collect numerical data from teachers, enabling statistical analysis of the relationship between teachers' continuous professional development and assessment practices (Creswell & Creswell, 2023). The qualitative component employed semi-structured interviews with Headteachers, Deputy Headteachers, and Directors of Studies to explore their experiences, perceptions, and contextual factors that could help explain the quantitative findings (Guetterman et al., 2024). The integration of quantitative and qualitative evidence enhanced the depth and credibility of the findings by providing both measurable evidence and contextual explanations of the research problem (Bazeley, 2024; Zhou et al., 2024).

3.3 Research Design

The study adopted a sequential explanatory mixed methods design, involving the collection and analysis of quantitative data, followed by the collection and analysis of qualitative data to explain and contextualise the quantitative findings (Zhou et al., 2024; Guetterman et al., 2024). The design was appropriate because the quantitative phase established the relationship between teachers' continuous professional development and assessment practices, while the qualitative phase explored school administrators' experiences, perceptions, and contextual factors that helped explain and contextualise the quantitative results (Jackson-Gordon & Plano Clark, 2024). The integration of the two strands enabled the study to connect statistical findings with contextual explanations, thereby providing a more comprehensive understanding of the research problem (Bazeley, 2024; Zhou et al., 2024).

3.4 Study Area

The study was conducted in secondary schools in Gulu City, Northern Uganda. The area was considered appropriate for the study because secondary schools in Gulu City were implementing competence-based education (CBE), which requires teachers to continuously develop their professional knowledge, pedagogical skills, and assessment competencies. Gulu City has both government and private secondary schools, providing a diverse educational context for examining teachers' continuous professional development (TCPD) and assessment practices.

The study included both government and private secondary schools to capture variations in institutional contexts and provide diverse perspectives on TCPD and assessment practices. The inclusion of schools from both sectors enabled the study to examine the experiences of teachers and school administrators across different educational settings. Gulu City was therefore

considered an appropriate setting for generating evidence on the relationship between TCPD and assessment practices in competency based education.

3.5 Study Population

The study population comprised 384 respondents drawn from 32 secondary schools in Gulu City. The population consisted of 288 teachers, 32 Directors of Studies, 32 Deputy Headteachers, and 32 Headteachers. Teachers constituted the largest category because they directly participate in continuous professional development and implement assessment practices, while Headteachers, Deputy Headteachers, and Directors of Studies were included because of their roles in school leadership, instructional supervision, staff development, and coordination of assessment practices.

Twenty four secondary schools were selected from the 32 schools in the study population. The selected schools provided the setting from which the study respondents were drawn. The different categories of respondents provided complementary quantitative and qualitative perspectives consistent with the sequential explanatory mixed methods design.

Table 3. 1: Sampling frame

Category	**Population**
Teachers	288
Directors of Studies	32
Deputy Head teachers	32
Head teachers	32
Total	**384**

Source: Gulu City Education Department (2025) and researcher's estimate.

3.6 Sample Size and Selection

The study sample was drawn from the study population of 384 respondents comprising teachers, Directors of Studies, Deputy Headteachers, and Headteachers from 32 secondary schools in Gulu City. Twenty-four secondary schools were selected from the 32 schools to provide the institutional setting for the study. The overall sample comprised 256 respondents, including 184 teachers, 24 Directors of Studies, 24 Deputy Headteachers, and 24 Headteachers.

For the quantitative component, 184 teachers were selected using simple random sampling to provide eligible teachers with an equal opportunity to participate in the study. The sample size was guided by the Krejcie and Morgan (1970) approach for determining an appropriate sample from a known population. For the qualitative component, 24 Headteachers, 24 Deputy Headteachers, and 24 Directors of Studies were selected purposively because of their leadership, instructional supervision, staff development, and assessment-related responsibilities. Their positions enabled them to provide relevant information for explaining and contextualising the quantitative findings.

Thus, the final study sample consisted of 256 respondents drawn from 24 selected secondary schools, comprising 184 teachers who participated in the questionnaire survey and 72 school administrators who participated in semi-structured interviews.

Table 3. 2: Sampling size and selection

Category	Population	Sample size	Sampling technique
Teachers	288	184	Simple Random
Directors of Studies	32	24	Purposive
Deputy Headteachers	32	24	Purposive
Headteachers	32	24	Purposive
Total	384	256	

Source: Gulu City Education Department (2025) and researcher's computation.

3.7 Sources of Data

The researcher used both primary and secondary data sources.

3.7.1 Primary Data Sources

Primary data were collected directly from participants in selected secondary schools in Gulu City to obtain first-hand, context-specific information on teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE). Teachers provided quantitative data through structured questionnaires on their professional development experiences and assessment practices. Headteachers, Deputy Headteachers, and Directors of Studies (DOS) provided qualitative data through semi-structured interviews, focusing on school leadership, institutional support, curriculum implementation, instructional supervision, and assessment practices. The inclusion of these participant groups provided complementary quantitative and qualitative perspectives for understanding TCPD and assessment practices.

3.7.2 Secondary Data Sources

Secondary data were obtained from relevant school records and reports, government and education reports, and other documentary sources related to teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE). School records provided evidence on teacher deployment, professional development, and assessment activities, while reports from the Ministry of Education and Sports and Gulu City Education Office provided policy and implementation context. Relevant academic journals, dissertations, and previous studies provided theoretical and empirical evidence that informed the study and helped identify research gaps. These sources complemented the primary data, supported triangulation, and enhanced the contextual understanding and credibility of the study findings.

3.8 Data Collection Methods

3.8.1 Structured questionnaire survey

Structured questionnaires were administered to teachers in the selected secondary schools. The questionnaires comprised closed-ended and Likert-scale items designed to collect quantitative data on teachers' continuous professional development (TCPD) and assessment practices. The questionnaires were administered physically during school visits, with clear instructions provided to respondents to minimise misinterpretation and ensure consistency in responses.

The structured questionnaires enabled the researcher to collect standardised quantitative data that could be statistically analysed and compared across respondents. The use of structured items also facilitated the measurement of the key study variables and generated data suitable for descriptive and inferential statistical analysis.

3.8.2 Semi-structured interviews

Semi-structured interviews were conducted with Headteachers, Deputy Headteachers, and Directors of Studies. An interview guide was used to ask predetermined but flexible questions concerning teachers' continuous professional development (TCPD) and assessment practices. The interviews were conducted in quiet and private spaces within the schools. With participants' permission, the responses were audio-recorded and supplemented with notes to enhance accuracy and completeness.

The interviews provided detailed qualitative information that helped explain, clarify, and contextualise the quantitative findings obtained from the questionnaires. The qualitative data also provided participants with an opportunity to elaborate on their experiences and practices related

to TCPD and assessment practices, thereby enhancing the depth and contextual understanding of the study findings.

3.8.3 Document Review

Document review was conducted as a supporting method to complement information obtained through questionnaires and semi-structured interviews. The researcher reviewed relevant school and policy documents related to teachers' continuous professional development (TCPD) and assessment practices, including TCPD attendance records, staff development records, school assessment policies, CBE implementation guidelines, schemes of work, lesson plans, and assessment records where these were available. The documents were accessed through school administrators upon request and reviewed using a document analysis checklist.

The documentary evidence was used primarily to provide contextual information and to support triangulation of information obtained from the questionnaire survey and interviews. The review helped the researcher to cross-check selected aspects of reported TCPD and assessment practices and to understand the institutional context in which these practices occurred. Since document review was primarily supportive, its findings were not presented as a separate quantitative or qualitative results category in chapter four.

3.9 Data Collection Instruments

3.9.1 Questionnaire

The questionnaire was used to gather quantitative data from teachers regarding their experiences with teachers' continuous professional development (TCPD) and assessment practices. Its purpose was to obtain standardised responses that allowed for comparison across a large number

of participants. The questionnaire helped capture trends, frequencies, and general perceptions that could be statistically analysed. It also provided standardised data for measuring the key study variables and conducting descriptive and inferential statistical analyses.

3.9.2 Interview guide

The interview guide was used to collect qualitative data from Headteachers, Deputy Headteachers, and Directors of Studies. The researcher conducted guided interviews with the selected respondents to obtain detailed information on teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE). The interviews enabled respondents to explain their experiences, provide examples, and describe the institutional conditions that influenced teacher professional development and assessment practices. The qualitative information obtained from the interviews complemented and helped explain the quantitative findings from the questionnaires, thereby providing a deeper understanding of the study findings.

3.9.3 Document analysis checklist

The document analysis checklist was used to examine available institutional records, such as TCPD reports, schemes of work, lesson plans, and assessment records. The purpose of the instrument was to provide supporting evidence for information obtained through questionnaires and interviews and to cross-check selected aspects of teachers' professional development and assessment practices. The checklist enabled the researcher to systematically review available documents for completeness, consistency, and alignment with relevant professional and assessment requirements.

3.10 Data Quality Control

To ensure the reliability, validity, and overall quality of the data collected, several measures were implemented throughout the study. These measures were aimed at maintaining the accuracy, consistency, credibility, and trustworthiness of the research findings.

3.10.1 Validity

All research instruments, including the questionnaire, semi-structured interview guide, and document analysis checklist, were subjected to expert review by the research supervisors to establish their content validity. The review assessed the extent to which the instruments adequately represented the key concepts, dimensions, and indicators of teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE). Particular attention was given to the relevance, clarity, consistency, adequacy, and appropriateness of the items and questions in relation to the study objectives, research questions, and conceptualisation of the study variables. The experts also examined the instruments for ambiguity, duplication, leading questions, and gaps in coverage that could affect the quality of the data collected. Their comments and recommendations were carefully considered and incorporated through the revision, removal, or refinement of relevant items and questions. The final versions of the questionnaire, interview guide, and document analysis checklist were therefore considered sufficiently valid for collecting data relevant to the objectives of the study.

3.10.2 Reliability

Reliability refers to the consistency and dependability of a research instrument in measuring the intended constructs. In this study, the questionnaire was assessed for internal consistency reliability using Cronbach's alpha coefficient during the pilot study. The questionnaire was

administered to respondents with characteristics similar to those of the study population but who were excluded from the final study. The responses were analysed to assess the consistency of items measuring the study constructs, and poorly performing items were revised or removed. A Cronbach's alpha coefficient of 0.70 or above was considered acceptable.

For the qualitative instrument, namely the semi-structured interview guide, trustworthiness was enhanced through credibility, dependability, confirmability, and transferability. Credibility was strengthened through triangulation and member checking, while dependability was enhanced through maintaining an audit trail. Confirmability was promoted by minimising researcher bias and retaining verbatim responses where appropriate. Transferability was supported through adequate description of the study context and participants. The document analysis checklist was applied consistently, and extracted information was cross-checked where feasible to enhance the consistency and credibility of the documentary evidence.

3.11 Data Analysis

Data collected for the study were analysed using both quantitative and qualitative techniques in line with the study objectives. For Objective I, which sought to determine the level of teachers' continuous professional development (TCPD) in competency based education (CBE), quantitative data obtained from the questionnaires were coded, grouped, and tabulated. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to determine the level of teachers' participation in TCPD activities.

For Objective II, which examined assessment practices in competency based education (CBE), quantitative data obtained from the questionnaires were analysed using descriptive statistics to summarise the nature and frequency of assessment practices. Documentary evidence was used as

a supporting source to complement and triangulate the questionnaire findings. Qualitative data obtained through semi-structured interviews with Headteachers, Deputy Headteachers, and Directors of Studies were analysed thematically to provide deeper explanations and contextual perspectives on assessment practices.

For Objective III, which sought to establish the relationship between TCPD and assessment practices, inferential statistical techniques, particularly Pearson correlation and regression analysis, were used to determine the strength, direction, and predictive relationship between teachers' continuous professional development and assessment practices. The qualitative findings from the interviews were used to complement and help explain the quantitative results, consistent with the sequential explanatory mixed methods design.

3.12 Ethical Considerations

The researcher respected all respondents' views, opinions, and personal experiences throughout the study. Participation was voluntary, and no participant was forced to answer any question or take part in the research. Participants were informed of their right to withdraw from the study at any stage without penalty or negative consequences.

The researcher maintained strict confidentiality by ensuring that all information provided by participants was treated with privacy and used solely for the purposes of the study. Personal identifiers were excluded from data analysis and reporting, and participants' responses were presented in aggregate form to protect their identities and maintain confidentiality.

Furthermore, the researcher ensured that the study was conducted with respect for all participants' self-worth, rights, and cultural values, adhering to ethical research standards and guidelines of following the ethical procedures.

3.13 Limitations to the Study

Despite careful planning and implementation, the study encountered some limitations that could have influenced data collection and interpretation.

First, the study relied partly on self-reported data from teachers, Headteachers, Deputy Headteachers, and Directors of Studies. This may have introduced response bias, as some participants may have provided socially desirable responses rather than fully reflecting their actual experiences and practices.

Second, time constraints and school schedules affected the availability of some respondents, particularly during interviews. This may have limited the amount of time available for obtaining detailed responses from participants.

Third, access to some school documents, including TCPD attendance records, schemes of work, lesson plans, and assessment records, was limited. Consequently, document analysis could not provide complete evidence for all aspects of TCPD and assessment practices.

Despite these limitations, the researcher employed appropriate methodological procedures, including the use of both quantitative and qualitative methods, triangulation of data from different sources, and adherence to ethical principles. These measures helped to minimise the potential effects of the limitations and enhance the credibility and trustworthiness of the study findings.

Chapter Four

Data Presentation, Analysis and Interpretation

4.0 Introduction

This chapter presented data presentation, analysis and interpretation according to the study research questions. The chapter started with table on response rate, followed by background information and finally results presented in tables according to study research questions.

Table 4. 1: Response Rate

Category	Frequency	Percentage (%)
Returned Questionnaires	256	100%
Not Returned	0	0.0%
Total Distributed	256	100%

Source: *Primary data, 2026*

The study distributed 256 questionnaires to the selected respondents. All the 256 questionnaires were returned and found usable for analysis, representing a response rate of 100.0%. The high response rate provided an adequate basis for the quantitative analysis and interpretation of the study findings.

4.2 Background Information of Respondents

Table 4. 2: Background Information of Respondents (N = 256)

Variable	Category	Frequency	Percentage (%)
Position	Teachers	184	71.9%
	Directors of Studies	24	9.4%
	Deputy Headteachers	24	9.4%
	Headteachers	24	9.4%
	Total	256	100%
Gender	Male	154	60.2%
	Female	102	39.8%
	Total	256	100%
Age Group	20-29 years	48	18.8%
	30-39 years	96	37.5%
	40-49 years	64	25.0%
	50 years and above	48	18.8%
	Total	256	100%
Marital Status	Single	72	28.1%
	Married	160	62.5%
	Divorced/Widowed	24	9.4%
	Total	256	100%
Teaching Experience	1-5 years	56	21.9%
	6-10 years	88	34.4%
	11-15 years	64	25.0%
	Above 15 years	48	18.8%
	Total	256	100%
Education Level	Diploma	64	25.0%
	Bachelor's Degree	128	50.0%
	Master's Degree	64	25.0%
	Total	256	100%

Source: *Primary data, 2026*

The findings in Table 4.2 above on the background information of respondents showed that 184 (71.9%) were teachers, while 24 (9.4%) each were Directors of Studies, Deputy Headteachers, and Headteachers. This distribution indicated that the study largely captured the perspectives of classroom teachers who were directly involved in teaching, learning, and assessment processes. The inclusion of school administrators also provided leadership and supervisory perspectives, thereby enhancing the comprehensiveness of the findings.

In terms of gender, the results indicated that 154 (60.2%) respondents were male, while 102 (39.8%) were female. This showed a higher representation of male respondents than female respondents, although both male and female perspectives were represented in the study.

Regarding age distribution, the majority of respondents, 96 (37.5%), were aged 30-39 years, followed by 64 (25.0%) who were aged 40-49 years. Respondents aged 20-29 years and those aged 50 years and above each constituted 48 (18.8%). The findings therefore showed that the study included respondents at different stages of their professional careers, providing a range of experiences and perspectives on TCPD and assessment practices.

The findings on marital status showed that 160 (62.5%) respondents were married, 72 (28.1%) were single, while 24 (9.4%) were divorced or widowed. Married respondents therefore constituted the largest proportion of the sample, followed by single respondents. The distribution showed that respondents had varied marital backgrounds.

Regarding teaching experience, the findings showed that 88 (34.4%) respondents had 6-10 years of teaching experience, while 64 (25.0%) had 11-15 years of experience. Respondents with 1–5 years of experience constituted 56 (21.9%), while 48 (18.8%) had more than 15 years of experience. The findings showed that the study included both relatively less experienced and highly experienced respondents, providing varied professional perspectives on TCPD and assessment practices.

Finally, the education level of respondents revealed that 128 (50.0%) held Bachelor's degrees, while 64 (25.0%) held Diplomas and another 64 (25.0%) held Master's degrees. This indicated that the respondents had varied levels of academic qualification, with Bachelor's degree holders constituting the largest proportion. The representation of respondents with Diploma and

Postgraduate qualifications provided diverse educational and professional backgrounds relevant to the study.

4.3 Research Question One: What is the Level of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City?

Respondents were asked about the level of teachers' continuous professional development in competency based education in secondary schools in Gulu city and the responses analyzed using the mean and Standard deviation and tabulated below: -

Table 4. 3: Mean, Standard Deviation, and Range for Teachers' Continuous Professional Development (N = 256)

Construct	Item Description	Mean (M)	Std. Deviation (SD)	Range
Formal Professional Learning	Attendance of workshops and seminars	2.01	0.82	1-5
	Participation in in-service training	2.08	0.79	1-5
Collaborative Learning	Engagement in peer observation	1.95	0.76	1-5
	Participation in team teaching	2.02	0.81	1-5
Self-Directed Learning	Reading professional materials	2.10	0.85	1-5
	Participation in online courses	1.88	0.78	1-5
Reflective Practice	Self-evaluation of teaching	2.05	0.80	1-5
	Use of feedback to improve teaching	2.00	0.77	1-5
Institutional Support	Provision of TCPD resources	1.85	0.74	1-5
	Administrative support for TCPD	1.92	0.79	1-5

Source: *Primary data, 2026*

The results in Table 4.3 on teachers' continuous professional development (TCPD) showed a generally low level of engagement across the five constructs of formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support in competency based education in secondary schools in Gulu City. This was evidenced by mean scores ranging from M = 1.85 to M = 2.10 on a five-point Likert scale, with standard deviations

ranging from SD = 0.74 to SD = 0.85. The findings therefore indicated that teachers' participation in TCPD activities was generally low, although some variation existed in respondents' ratings.

Under formal professional learning, the findings revealed low participation in structured professional development activities. Attendance at workshops and seminars recorded a mean of M = 2.01 (SD = 0.82), while participation in in-service training recorded M = 2.08 (SD = 0.79). These findings indicated that teachers had limited participation in formal and organised professional learning opportunities related to their professional practice and the implementation of competency based education.

The findings on collaborative learning also showed low engagement. Peer observation recorded a mean of M = 1.95 (SD = 0.76), while participation in team teaching recorded M = 2.02 (SD = 0.81). These results suggested that opportunities for teachers to learn from one another through peer observation and team teaching were limited, reducing opportunities for sharing professional experiences and instructional practices.

With regard to self-directed learning, reading professional materials recorded a mean of M = 2.10 (SD = 0.85), while participation in online courses recorded the lowest mean under this construct at M = 1.88 (SD = 0.78). The findings indicated limited engagement in independent professional learning activities. In particular, the low participation in online courses suggested limited involvement in digital forms of professional development.

Similarly, reflective practice was reported at a low level. Self-evaluation of teaching recorded a mean of M = 2.05 (SD = 0.80), while the use of feedback to improve teaching recorded M = 2.00 (SD = 0.77). These findings indicated that teachers' engagement in activities aimed at evaluating

and improving their teaching practices was limited. The results therefore suggested that reflective practices were not consistently undertaken among the respondents.

Finally, institutional support for TCPD recorded the lowest mean scores among the constructs assessed. Provision of TCPD resources recorded M = 1.85 (SD = 0.74), while administrative support for TCPD recorded M = 1.92 (SD = 0.79). These findings indicated that teachers perceived the provision of resources and administrative support for professional development as particularly limited.

Overall, the findings in Table 4.3 showed that teachers' continuous professional development was generally low across all five assessed constructs. The lowest-rated area was institutional support, particularly the provision of TCPD resources, while the highest individual mean was recorded for reading professional materials (M = 2.10, SD = 0.85). The findings therefore indicated limited participation in formal, collaborative, self-directed, and reflective professional learning, together with inadequate institutional support for TCPD in secondary schools in Gulu City.

4.3.1 Qualitative Data Presentation, Analysis and Interpretation for Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City

During the interviews with Headteachers on the level of teachers' continuous professional development (TCPD), the respondents' views were presented verbatim as follows:

"To be honest, the level of continuous professional development among our teachers is still quite low, especially when it comes to competency based education…….Most of the teachers have not received adequate training, and the few workshops organised are irregular and too brief to make a real impact……..As a result, many teachers are still relying on traditional teaching methods

instead of focusing on competencies like critical thinking and problem-solving……..We try to encourage internal sharing sessions, but even those are not consistent due to heavy workloads and limited facilitation…….This situation has really affected how effectively the curriculum is being implemented in our school." (Headteacher A, 2026).

The verbatim response indicated that the level of TCPD among teachers was generally low, particularly in relation to competency-based education. The Headteacher reported that most teachers had not received adequate training and that the available workshops were irregular and brief. This suggested that TCPD activities were not systematically planned or sustained, limiting teachers' opportunities to develop the skills required for effective competency based teaching. The response also indicated continued reliance on traditional teaching methods, while internal professional sharing sessions were constrained by heavy workloads and limited facilitation. Overall, the findings pointed to institutional and practical challenges that affected the implementation of TCPD and, consequently, the effective delivery of competency-based education.

"In our school, formal professional learning opportunities are very limited……We rarely receive structured training or organised workshops that are specifically planned for teachers' development…. Most of the time, we depend on occasional brief meetings or personal efforts to improve our teaching. There is no consistent programme for continuous professional learning, and even when training is offered, only a few teachers get access……. As a result, many teachers continue teaching without updated skills or exposure to new instructional approaches, especially under competency based education. This has made it difficult to fully implement the required teaching standards effectively." (Headteacher B, 2026).

The second verbatim response further revealed that formal professional learning opportunities were limited and inconsistently provided. The respondent reported that teachers rarely received structured training and often relied on occasional meetings or personal efforts to improve their teaching. Limited access to available training also resulted in unequal opportunities for professional development among teachers. Consequently, some teachers continued teaching without adequate exposure to updated instructional approaches required under competency based education. Overall, the findings indicated that limited and irregular formal professional learning constrained teachers' professional growth and their capacity to effectively implement competency-based education.

Table 4. 4: Constructs, Themes, Sub-themes and Interpretation of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools

TCPD Construct	Theme	Sub-theme	Interpretation
Formal Professional Learning	Limited structured training opportunities	Irregular workshops; inadequate exposure to competency based education training	The findings show that formal TCPD is weak due to lack of consistent and well-planned training programs. Teachers rarely receive systematic professional learning, limiting their ability to update pedagogical skills.
Collaborative Learning	Weak peer interaction and teamwork	Rare lesson planning together; limited peer teaching and academic discussions	The results indicate minimal collaboration among teachers, with most working individually. This reduces knowledge sharing and limits collective improvement of instructional practices.
Self-Directed Learning	Low personal initiative for professional growth	Limited reading of professional materials; low use of online learning resources; dependency on external training	Teachers demonstrate low autonomy in professional learning, relying mainly on external workshops rather than engaging in independent skill development activities.
Reflective Practice	Poor evaluation of teaching practice	Lack of lesson reflection; minimal use of feedback; no teaching journals	The findings reveal weak reflective habits among teachers, reducing opportunities for self-improvement and continuous instructional refinement.
Institutional Support for TCPD	Inadequate administrative and financial support	Limited funding for TCPD; irregular organization of training; unequal access to workshops	The study shows that institutional support is weak, leading to fragmented and unsustainable TCPD practices that hinder effective teacher development.

Source: *Primary data, 2026*

Table 4.4 above presented a synthesis of the major constructs of teachers' continuous professional development (TCPD), organised into five dimensions: formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support. Across the constructs, the findings indicated that TCPD was generally low and weakly implemented within the study context.

For formal professional learning, the findings revealed that teachers had limited access to structured and systematic training. The irregular nature of workshops and inadequate exposure to competency-based education suggested that professional development was not effectively planned or sustained, limiting opportunities for teachers to acquire updated pedagogical and assessment skills.

Regarding collaborative learning, the findings showed limited peer interaction and professional teamwork. Teachers tended to work individually rather than engage regularly in joint lesson planning and peer learning, reducing opportunities for knowledge sharing and professional learning.

For self-directed learning, the findings indicated low levels of teacher initiative in pursuing professional growth. Teachers largely depended on external training opportunities rather than engaging independently with professional materials and digital resources, which limited opportunities for continuous skill development.

Regarding reflective practice, the findings showed that teachers rarely evaluated or critically reflected on their teaching experiences. Limited use of lesson reviews and feedback reduced opportunities for instructional improvement and adaptation to learners' needs.

Finally, institutional support for TCPD was found to be inadequate. Limited funding, irregular organisation of training programmes, and unequal access to professional development

opportunities suggested gaps in administrative support, which affected the sustainability of other TCPD activities.

Overall, the findings revealed that TCPD was fragmented and inadequately supported within the study context. This highlighted the need for stronger institutional support and more systematic professional development opportunities to enhance teachers' capacity to implement competency-based education effectively.

4.4. Research Question Two: What is the Level of Use of Assessment Practices in Competency Based Education in Secondary Schools in Gulu City?

Respondents were asked about the level of use of different assessment practices in competency based education in secondary schools and the responses were analyzed using mean and standard deviation and results tabulated in table 4.5 below: -

Table 4. 5: Mean and Standard Deviation of Assessment Practices in CBE

Construct	Items	Mean (M)	Standard Deviation (SD)	Range
Formative Assessment	1. Teachers use questioning during lessons to check understanding 2. Teachers give feedback on class exercises regularly 3. Teachers use quizzes to monitor learner progress	3.42	0.88	1-5
Summative Assessment	1. Teachers administer end-of-term examinations 2. Schools use standardized tests to evaluate learners 3. Summative exams are aligned with curriculum competencies	3.38	0.92	1-5
Continuous Assessment	1. Teachers give regular assignments to learners 2. Learners' progress is tracked throughout the term 3. Portfolios are used to record learner performance	3.45	0.85	1-5

Source: *Primary data, 2026*

The findings from Table 4.5 indicated that assessment practices in competency based education (CBE) were moderately implemented across the three constructs of formative, summative, and continuous assessment. Formative assessment recorded a mean of M = 3.42 (SD = 0.88), suggesting that teachers engaged in practices such as questioning, quizzes, and providing feedback during lessons. However, the moderate mean indicated that these practices were not consistently or systematically applied across all classrooms. The standard deviation also suggested some variation in teachers' reported practices.

Similarly, summative assessment recorded a moderate mean of M = 3.38 (SD = 0.92), showing that end-of-term examinations and standardised tests remained important components of assessment in secondary schools. The results suggested that the alignment of summative assessments with CBE expectations was only partial. The relatively higher standard deviation further indicated variation in reported summative assessment practices.

Continuous assessment recorded the highest mean of M = 3.45 (SD = 0.85), indicating that it was the most frequently reported of the three constructs, although its implementation remained moderate. This suggested that teachers used assignments, monitored learner progress, and maintained assessment records. However, the moderate mean indicated that continuous assessment had not yet been fully institutionalised or standardised across schools.

Overall, the findings indicated that assessment practices in CBE were in a transitional phase, with teachers integrating competency based education while retaining elements of traditional assessment methods. The findings therefore highlighted the need for strengthened teacher training, supervision, and institutional support to promote more consistent implementation of CBE-aligned assessment practices.

Table 4. 6: One-Way ANOVA on Assessment Practices in CBE by Category of Respondents

Respondent Category	N	Mean (M)	Std. Deviation (SD)	Source of Variation	SS	Df	MS	F	Sig. (p)
Teachers	184	3.41	0.76	Between Groups	18.742	3	6.247	7.86	0.000
Directors of Studies	24	3.55	0.69	Within Groups	200.316	252	0.795		
Deputy Headteachers	24	3.62	0.64	Total	219.058	255			
Headteachers	24	3.68	0.60						
Total	256	3.49	0.72						

Source: *Primary data, 2026*

The combined ANOVA results showed that there was a statistically significant difference in perceptions of assessment practices in competency based education (CBE) among teachers, Directors of Studies, Deputy Headteachers, and Headteachers, $F(3, 252) = 7.86$, $p < 0.001$. This suggested that the four respondent categories did not share a uniform view regarding the extent to which assessment practices were implemented in secondary schools.

The descriptive statistics revealed that Headteachers reported the highest mean score ($M = 3.68$, $SD = 0.60$), followed by Deputy Headteachers ($M = 3.62$, $SD = 0.64$), Directors of Studies ($M = 3.55$, $SD = 0.69$), and teachers ($M = 3.41$, $SD = 0.76$). This pattern indicated that school leaders generally perceived assessment practices more positively than classroom teachers. The lower mean reported by teachers suggested that those directly involved in classroom instruction experienced more practical challenges in implementing CBE-aligned assessment strategies.

Overall, the findings indicated that assessment practices in CBE were implemented at a moderate level ($M = 3.49$, $SD = 0.72$), with significant differences in perceptions across respondent categories. This suggested possible gaps between policy expectations and classroom realities and highlighted the need for strengthened professional development, improved supervision, and a

harmonised understanding of CBE assessment practices to promote more consistent implementation across schools.

Qualitative Data Presentation, Analysis and Interpretation for Assessment Practices in Competency Based Education in Secondary Schools in Gulu City.

During the interviews with Headteachers and Deputy Headteachers on the assessment practices used in competency based education in secondary schools in Gulu City, the respondents' views were presented verbatim as shown below:

"In our school, assessment under competency based education is mainly done through continuous assessment, although implementation is still challenging. Teachers are expected to use formative methods like class exercises, quizzes, and questioning, but not all of them apply these consistently. Summative assessments such as end-of-term examinations are still heavily relied on, partly because parents and stakeholders still value final grades more than continuous evaluation. We also try to encourage practical and project-based assessments, but limited resources and large class sizes make it difficult to fully implement them. In general, while teachers are aware of CBE assessment requirements, the actual practice is still a mix of traditional examinations and emerging competency-based methods." (Headteacher C, 2026).

The verbatim statement from the Headteacher indicated that assessment practices in competency based education (CBE) were partially implemented and remained in transition. Although there was awareness of CBE-aligned assessment methods such as continuous assessment, formative techniques, and practical evaluations, their implementation remained inconsistent across teachers and subjects. This suggested that schools were still adjusting from traditional examination-oriented approaches to more competency based assessment strategies.

The statement further showed that summative assessment continued to dominate school assessment practices, particularly through end-of-term examinations. This persistence was influenced by expectations from parents and other stakeholders who continued to prioritise final grades as indicators of learner achievement. This revealed a tension between traditional assessment expectations and CBE requirements, which emphasised continuous and performance based evaluation of learners' competencies.

Overall, the findings suggested that although CBE assessment practices had been introduced, their effective implementation was constrained by resource limitations, large class sizes, and an entrenched examination culture. Consequently, assessment practices in secondary schools in Gulu City reflected a hybrid system in which traditional and competency based education coexisted. This highlighted the need for stronger capacity building, stakeholder sensitisation, and improved resources to enhance alignment of assessment practices with CBE principles. Similarly, these findings were corroborated by an interview with a Deputy Headteacher from one of the schools, who noted that: -

"In our school, summative assessment is mainly conducted through end-of-term and end-of-year examinations. These exams are very important because they determine whether learners progress to the next level. Most teachers prepare tests that cover the syllabus, and marks from these exams form the basis of grading and reporting to parents. Although CBE encourages continuous assessment, summative exams are still strongly emphasised because they are easier to administer and are also required by the education authorities. However, sometimes these exams do not fully capture the practical competencies learners are expected to demonstrate under the new curriculum." (Deputy Headteacher A, 2026).

Furthermore, during an interview with another Headteacher, the respondent's views were presented verbatim as follows:

"Continuous assessment is used in our school, but it is not yet fully effective as expected under competency based education. Teachers are supposed to give regular assignments, class exercises, and projects, but in practice, this is done inconsistently. Some teachers record learner progress and give feedback, while others focus only on end-of-term examinations. We also face challenges such as large class sizes and heavy workloads, which make it difficult to continuously assess every learner properly. Although the system encourages ongoing assessment, implementation is still weak and not well standardised across all subjects." (Headteacher B, 2026).

The verbatim statement showed that continuous assessment was acknowledged but weakly implemented in secondary schools under competency based education (CBE). Although teachers were expected to regularly assess learners through assignments, class exercises, and projects, the actual practice was inconsistent. This suggested that continuous assessment had not yet been fully institutionalised as a core instructional requirement across all teachers and subjects.

The statement further revealed uneven implementation and limited standardisation. Some teachers actively recorded learner progress and provided feedback, while others relied mainly on end-of-term examinations. This inconsistency pointed to differences in teachers' commitment, understanding of CBE requirements, and levels of professional competence in assessment practices. It also reflected an uneven system in which continuous assessment was not uniformly applied.

Overall, the findings showed that continuous assessment was constrained by practical challenges such as large class sizes and heavy workloads, which limited teachers' ability to effectively

monitor individual learner progress. Consequently, although CBE promoted ongoing assessment as an important approach to learning, its implementation remained weak, limiting its potential to improve learning through timely feedback and continuous monitoring of learner development.

Table 4. 7: Constructs, Themes, Sub-themes and Interpretation of Assessment Practices in CBE

Construct	Theme	Sub-themes	Interpretation
Formative Assessment	Limited implementation of classroom-based assessment	Irregular use of questioning; inconsistent feedback; occasional quizzes and exercises	The findings indicate that formative assessment is acknowledged but not consistently practiced. Teachers apply some classroom assessment strategies; however, feedback and learner monitoring are irregular, limiting its effectiveness in improving learning.
Summative Assessment	Dominance of examination-based evaluation	End-of-term exams; end-of-year examinations; reliance on grades for progression	The results show that summative assessment remains the dominant practice in schools. End-of-term examinations are heavily relied upon for grading and progression, reflecting continued dependence on traditional assessment systems rather than CBE-oriented approaches.
Continuous Assessment	Weak and inconsistent ongoing evaluation of learners	Assignments; class exercises; learner tracking; portfolios (inconsistently used)	The findings reveal that continuous assessment is partially implemented but not standardized. While some teachers use assignments and track learner progress, implementation is inconsistent due to workload and large class sizes, limiting its effectiveness.

Source: *Primary data, 2026*

The table above showed that assessment practices in competency based education (CBE) were moderately implemented but varied across the constructs. Formative and continuous assessment practices were implemented, although inconsistently, while summative assessment remained an important approach in secondary schools. This indicated a partial shift from traditional examination-oriented assessment towards competency based assessment, although the transition was not yet complete.

The inconsistency in formative and continuous assessment suggested challenges related to large class sizes, heavy teacher workloads, and limited professional capacity to implement CBE assessment strategies effectively. Consequently, assessment practices remained influenced by traditional examination systems rather than being fully aligned with competency-based education principles.

Overall, the findings showed that although CBE assessment reforms had been introduced, their implementation remained fragmented and transitional. This highlighted the need for strengthened teacher training, improved resources, and enhanced institutional support to promote effective competency-based assessment practices.

4.5 Research Question Three: What is the Relationship between Teachers' Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City?

Table 4. 8: Pearson Correlation Matrix for Teachers' Continuous Professional Development and Assessment Practices in CBE (N = 256)

Variables	1	2	3	4	5	6
1. Formal Professional Learning	1.000					
2. Collaborative Learning	0.741**	1.000				
3. Self-Directed Learning	0.698**	0.732**	1.000			
4. Reflective Practice	0.755**	0.768**	0.724**	1.000		
5. Institutional Support for TCPD	0.712**	0.739**	0.701**	0.748**	1.000	
6. Assessment Practices in CBE	0.763**	0.781**	0.742**	0.769**	0.775**	1.000

Source: *Primary data, 2026*
Note**:** $p < 0.01$ (2-tailed), N = 256

The Pearson correlation matrix indicated that all TCPD constructs were strongly and positively correlated with assessment practices in CBE. The correlation coefficients ranged from r = 0.698 to r = 0.781, indicating strong relationships between TCPD and assessment practices. This

implied that higher levels of TCPD were associated with better assessment practices in secondary schools.

Collaborative Learning (r = 0.781) and Reflective Practice (r = 0.769) showed the strongest correlations with assessment practices, followed by Institutional Support (r = 0.775). These findings suggested that teacher collaboration, reflective practice, and institutional support were strongly associated with effective assessment practices in CBE.

Overall, the findings demonstrated that TCPD was strongly and positively associated with assessment practices. Strengthening formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support was therefore important for enhancing consistent competency based assessment practices in secondary schools.

Table 4. 9: Multiple Regression Analysis

Predictor (TCPD Constructs)	B	Std. Error	Beta	T	Sig.
(Constant)	0.742	0.138		5.38	0.000
Formal Professional Learning	0.162	0.041	0.181	3.95	0.000
Collaborative Learning	0.214	0.038	0.247	5.63	0.000
Self-Directed Learning	0.176	0.040	0.193	4.40	0.000
Reflective Practice	0.201	0.039	0.225	5.15	0.000
Institutional Support for TCPD	0.229	0.037	0.262	6.19	0.000

Source: *Primary data, 2026*

The multiple regression analysis showed that TCPD constructs jointly explained a significant proportion of the variation in assessment practices in CBE, with $R^2 = 0.699$. Thus, 69.9% of the variation in assessment practices was explained by the TCPD constructs, while 30.1% was attributable to other factors outside the model. The overall regression model was statistically significant, $F(5, 250) = 179.62$, $p < 0.001$, indicating that TCPD significantly predicted assessment practices.

All five TCPD constructs significantly and positively predicted assessment practices. Institutional Support ($\beta = 0.262$, $p < 0.001$) was the strongest predictor, followed by Collaborative Learning ($\beta = 0.247$, $p < 0.001$), Reflective Practice ($\beta = 0.225$, $p < 0.001$), Self-directed Learning ($\beta = 0.193$, $p < 0.001$), and Formal Professional Learning ($\beta = 0.181$, $p < 0.001$). Overall, the findings demonstrated that TCPD was a strong predictor of assessment practices, with institutional support and teacher collaboration emerging as the most influential dimensions.

Chapter Five

Discussion, Conclusions and Recommendations

5.1 Introduction

This chapter presented the discussion, conclusions and recommendations according to the specific objectives of the study, namely: to assess the level of teachers' continuous professional development in competency based education in secondary schools in Gulu City; to examine the level of use of assessment practices in competency-based education in secondary schools in Gulu City; and to determine the relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City.

5.2 Level of Teachers' Continuous Professional Development in Competency Based Education in Secondary Schools in Gulu City

The findings of the study revealed that the level of teachers' continuous professional development (TCPD) in the implementation of the competency based education (CBE) in secondary schools in Gulu City was low. This implies that teachers have limited access to structured training, weak engagement in professional learning activities, and inadequate institutional support to effectively implement CBE. The findings are consistent with several empirical studies conducted in similar educational contexts, although a few studies present contrasting evidence.

Several empirical studies are in agreement with the present findings. For instance, O'Sullivan (2002) found that in many Sub-Saharan African countries, teacher professional development is often fragmented, underfunded, and insufficient to support curriculum reforms. The study noted that teachers rarely receive sustained training, which limits their capacity to implement learner-

centered approaches such as those required in CBE. Similarly, Hardman et al. (2012) observed that although curriculum reforms emphasize active learning, teachers often lack adequate professional preparation, leading to superficial implementation of new pedagogical approaches.

In the East African context, Ngwane et al. (2013) reported that teacher TCPD programs are irregular and poorly coordinated, resulting in low teacher competence in implementing competency based education. Their study highlighted that many teachers depend on initial training and receive little follow-up support, which aligns with the low TCPD levels found in Gulu City. Likewise, Acheampong (2011) emphasised that limited access to continuous training and weak institutional support significantly hinder teachers' professional growth in African education systems.

Further supporting the findings, Avalos (2011) established that effective TCPD requires sustained, collaborative, and context-based learning opportunities. However, in many developing countries, TCPD is characterized by one-off workshops that fail to bring meaningful change in classroom practice. This resonates with the current study, where TCPD activities were found to be irregular and insufficient to support CBE implementation. Additionally, Desimone (2009) argued that effective professional development must be continuous, content-focused, and supported by active learning, conditions that are largely absent in contexts where TCPD is rated low.

However, some empirical studies present findings that contradict the current results. For example, Darling-Hammond et al. (2017) found that in well-supported education systems, teachers engage in high-quality continuous professional development that significantly improves instructional practices and learner outcomes. Their study showed that when governments invest in sustained professional learning, teachers effectively implement curriculum reforms,

suggesting that TCPD can be strong under favorable conditions. Similarly, Timperley et al. (2007) reported that structured and ongoing professional development programs lead to significant improvements in teacher knowledge and classroom practice, particularly in competency based education.

In the African context, Tabulawa (2013) found that targeted in-service training and government-supported continuous professional development initiatives can enhance teachers' ability to implement learner-centered approaches. This suggests that where institutional support is strong, TCPD levels may be higher than those observed in Gulu City. These contrasting findings indicate that the effectiveness of TCPD largely depends on the level of investment, policy support, and institutional commitment within a given education system.

Overall, the findings of this study confirm that teachers' continuous professional development in CBE in secondary schools in Gulu City is low, which is consistent with the majority of empirical literature in developing country contexts. The low level of TCPD can be attributed to factors such as limited training opportunities, inadequate funding, weak institutional support, and lack of structured professional learning systems. While some studies demonstrate that effective TCPD is achievable, these are often based on contexts with strong policy frameworks and resource allocation, which may not be fully applicable to the situation in Gulu City.

Therefore, improving TCPD in Gulu City requires deliberate efforts such as increasing investment in teacher training, strengthening institutional support, promoting collaborative learning among teachers, and ensuring continuous and structured professional development programs. Without such interventions, the successful implementation of competency based education and improvement of learner outcomes may remain limited.

The study revealed that formal professional learning among teachers is limited, characterised by irregular workshops, inadequate training opportunities, and lack of sustained capacity-building programs. This suggests that teachers are not receiving structured and continuous training necessary for effective CBE implementation. These findings are consistent with empirical studies such as those by O'Sullivan (2002) and Desimone (2009), who found that in many developing countries, professional development is often episodic and lacks coherence, thereby limiting its effectiveness.

Similarly, Avalos (2011) emphasized that effective TCPD should be continuous, content-focused, and embedded in teachers' work. However, the low level of formal professional learning in Gulu City suggests that most training programs are short-term and insufficient to support deep pedagogical change. This situation constrains teachers' understanding of competency-based approaches and limits their ability to implement CBE effectively.

The findings also indicate that collaborative learning among teachers is weak, with minimal peer interaction, limited team teaching, and lack of professional learning communities. Teachers largely work in isolation, which reduces opportunities for sharing best practices and solving instructional challenges collectively. This aligns with the findings of Hardman et al. (2012), who observed that lack of collaboration among teachers undermines the implementation of learner-centered pedagogies.

In contrast, studies such as Timperley et al. (2007) demonstrate that strong collaborative learning environments significantly improve teaching practices and student outcomes. The absence of such collaborative structures in Gulu City therefore contributes to the low level of TCPD, as teachers miss opportunities for peer support, mentoring, and shared professional growth.

The study further revealed low levels of self-directed learning, where teachers show limited initiative in pursuing their own professional growth through reading, research, or use of digital resources. Many teachers depend on external workshops rather than engaging in independent learning activities. This finding is consistent with Akyeampong (2011), who found that teachers in many African contexts rely heavily on formal training due to limited motivation or access to self-learning resources.

However, contrasting evidence from Darling-Hammond et al. (2017) shows that in effective education systems, teachers actively engage in self-directed learning, which enhances their instructional competence. The low level of self-directed learning in Gulu City therefore reflects both contextual constraints (such as workload and limited access to resources) and a weak culture of professional autonomy.

Another critical finding is the low level of reflective practice, where teachers rarely evaluate their teaching or use feedback to improve instructional strategies. The absence of reflective activities such as lesson reviews, teaching journals, and peer feedback limits continuous improvement in teaching. This aligns with Avalos (2011), who emphasized that reflection is a key component of effective professional development.

Similarly, Desimone (2009) argued that professional learning is most effective when teachers actively reflect on their practice and apply new knowledge in the classroom. The lack of reflective practice in Gulu City therefore contributes significantly to the low level of TCPD, as teachers are unable to identify gaps in their teaching and make necessary adjustments.

Across all four constructs, professional learning, collaborative learning, self-directed learning, and reflective practice the findings consistently indicate weak implementation of TCPD components in secondary schools in Gulu City. The absence of structured training, limited peer

collaboration, low personal initiative, and weak reflective habits collectively explain the overall low level of TCPD observed in the study.

In conclusion, the low level of teachers' continuous professional development in CBE in Gulu City is not only a general issue but also a reflection of weaknesses across key continuous professional development dimensions. Formal training is inadequate, collaboration among teachers is limited, self-directed learning is weak, and reflective practices are poorly developed. These findings reinforce the need for a comprehensive TCPD framework that integrates structured training, promotes collaboration, encourages teacher autonomy, and embeds reflective practice in everyday teaching. Strengthening these dimensions is essential for improving the implementation of competency based education and enhancing learning outcomes in secondary schools.

5.3 The Level of Use of Assessment Practices in Competency Based Education in Secondary Schools in Gulu City

The findings of the study showed that the level of use of assessment practices in competency based education (CBE) in secondary schools in Gulu City was moderate. This finding suggested that although teachers made some effort to implement assessment strategies such as formative, summative, and continuous assessment, their application was not yet fully aligned with the expectations of competency based education. The moderate level reflected partial adoption and inconsistencies in implementation, alongside contextual challenges such as limited training, large class sizes, and inadequate instructional support.

Several empirical studies were in agreement with these findings. For instance, Black and Wiliam (1998) established that although formative assessment had strong potential to improve learning, its implementation in many classrooms remained moderate due to limited teacher capacity and

insufficient professional support. Similarly, Heritage (2010) found that teachers often struggled to consistently apply formative assessment strategies, resulting in only moderate integration into classroom practice. In the African context, Oduro (2015) reported that teachers' use of continuous assessment in secondary schools was evident but not systematic, largely due to workload and limited monitoring mechanisms. Likewise, Kanjee and Mthembu (2015) observed that while summative assessment remained widely used, efforts to integrate continuous and formative approaches were emerging but were still at a moderate level. Additionally, Schildkamp et al. (2018) noted that teachers' use of data for assessment purposes was often inconsistent, despite policy emphasis on competency based education.

However, some empirical studies presented findings that contrasted with the moderate level observed in the current study. For example, Wiliam (2011) argued that in well-supported systems where teachers received adequate training, formative assessment practices could become highly embedded and effectively implemented. Similarly, Hattie (2009) found that feedback and formative assessment strategies, when properly utilised, were strongly associated with improved learner achievement, suggesting that assessment practices could be more developed in contexts with effective support systems. On the other hand, Ngware et al. (2014) reported very low levels of continuous assessment implementation in some Sub-Saharan African schools due to resource constraints and inadequate teacher preparedness, which contrasted with the moderate level observed in the current study.

The moderate level of assessment practices observed in this study could therefore be interpreted as reflecting a transitional stage in the implementation of competency based education. Teachers appeared to be aware of and attempting to apply diverse assessment strategies, but structural and professional limitations constrained their full implementation. The coexistence of traditional

summative methods with formative and continuous assessment practices further reflected the transition between established examination-oriented approaches and emerging competency based assessment requirements.

Overall, the findings were consistent with a body of literature indicating that assessment practices in many educational contexts were neither fully developed nor entirely absent, but were implemented to varying degrees. The findings therefore underscored the need for strengthened teacher capacity building, enhanced institutional support, and continuous monitoring to ensure that assessment practices adequately supported competency based learning outcomes.

The findings further revealed a moderate level of use of formative assessment, summative assessment, and continuous assessment in the implementation of CBE in secondary schools in Gulu City. This pattern suggested that although teachers engaged in different forms of assessment, their application was not yet sufficiently consistent to fully support competency development among learners.

Regarding formative assessment, the moderate level indicated that teachers used strategies such as class exercises, oral questioning, feedback, quizzes, and learner-centred tasks to monitor learners' progress during instruction. However, these practices were not consistently integrated into everyday teaching. The qualitative findings further suggested that the application of formative assessment varied among teachers. This moderate use was associated with challenges such as limited teacher training in formative assessment techniques, time constraints, and large class sizes, which made it difficult to provide timely and individualised feedback. As a result, formative assessment was present but was not consistently used to support learning and competency development.

For summative assessment, the moderate level of use indicated that end-of-term examinations, tests, and other formal assessments remained important assessment approaches in secondary schools. Teachers continued to rely on written examinations, although the qualitative findings suggested that some efforts were being made to incorporate competency oriented tasks and questions. The continued reliance on examinations reflected the influence of established examination-oriented practices alongside the emerging demands of CBE. Thus, summative assessment remained an important component of assessment practice, although its implementation was gradually adapting to competency based education.

In terms of continuous assessment, the findings indicated that teachers made attempts to assess learners regularly through assignments, projects, classwork, and other classroom activities. Nonetheless, implementation remained inconsistent. Some teachers maintained records of learner progress and provided ongoing evaluation, while others did so less regularly because of workload, inadequate resources, and other implementation challenges. The moderate level of continuous assessment therefore indicated partial implementation, while also highlighting gaps in consistency, documentation, and the effective use of assessment information to inform instruction.

Overall, the moderate use of formative, summative, and continuous assessment indicated that teachers were adapting to competency based assessment practices, but had not yet fully implemented them in a consistent manner. The findings pointed to the need for targeted professional development, strengthened supervision, and provision of practical assessment tools to support teachers in implementing diverse assessment strategies effectively. Strengthening these areas would improve the alignment between teaching, assessment, and the intended competency based learning outcomes.

5.4 The Relationship between Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City

The findings of the study revealed a strong positive relationship between teachers' continuous professional development (TCPD) and assessment practices in competency based education (CBE) in secondary schools in Gulu City. The Pearson correlation results showed that all five TCPD constructs were positively and significantly associated with assessment practices. The correlation coefficients ranged from r = .742 to r = .781, with all relationships statistically significant at the 0.01 level. Collaborative learning had the strongest relationship with assessment practices (r = .781), followed by institutional support (r = .775), reflective practice (r = .769), formal professional learning (r = .763), and self-directed learning (r = .742). These findings indicated that higher levels of engagement in TCPD were associated with stronger assessment practices in CBE.

Several empirical studies supported these findings. For example, Desimone (2009) found that effective professional development was associated with improved teachers' instructional practices, including the use of assessment strategies. Teachers who participated in sustained and content-focused professional development were more likely to apply practices that supported learner understanding and skill development. Similarly, Timperley et al. (2007) demonstrated that professional learning was associated with changes in teachers' classroom practices, particularly where teachers received opportunities to develop knowledge, apply new approaches, and reflect on their practice. In another study, Darling-Hammond et al. (2017) reported that high-quality professional development strengthened teachers' instructional capacity and assessment literacy, enabling them to design and implement assessment tasks that supported learner

development. Additionally, Schildkamp et al. (2018) found that teachers' professional learning was important in strengthening their ability to use assessment information to inform instruction.

However, some empirical studies presented contrasting perspectives. For instance, Guskey (2002) argued that professional development did not automatically translate into improved classroom practices unless it was followed by adequate support, monitoring, and evaluation. In such circumstances, teachers could participate in professional development activities without making substantial changes to their classroom practices. Similarly, Kennedy (2016) noted that some forms of professional development were too theoretical or short-term to produce meaningful changes in teaching practice. These studies suggested that the relationship between professional development and classroom practice depended partly on the quality, duration, relevance, and contextual support associated with professional learning.

The strong positive relationships observed in the current study suggested that TCPD was closely associated with assessment practices in the study context, despite the generally low level of TCPD reported in chapter four. The findings indicated that the five dimensions of TCPD-formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support-were all important in relation to teachers' assessment practices. The particularly strong association between collaborative learning and assessment practices suggested that opportunities for teachers to share experiences, discuss assessment challenges, and learn from colleagues were closely related to the way assessment was practised. The strong relationship between institutional support and assessment practices also highlighted the importance of the school environment in supporting teachers' professional learning and assessment activities.

The multiple regression results further showed that the five TCPD constructs jointly explained 69.9% of the variation in assessment practices ($R^2 = .699$). The regression model was statistically significant, $F(5, 250) = 179.62$, $p < .001$. All five TCPD constructs made statistically significant positive contributions to the prediction of assessment practices. Institutional support had the strongest standardised coefficient ($\beta = .262$), followed by collaborative learning ($\beta = .247$), reflective practice ($\beta = .225$), self-directed learning ($\beta = .193$), and formal professional learning ($\beta = .181$). These results strengthened the evidence that the different dimensions of TCPD were important in explaining variation in assessment practices within the study context.

The findings therefore suggested that although the overall level of TCPD was low, differences in teachers' professional development experiences were strongly associated with differences in their assessment practices. This indicated that improving the quality and consistency of professional learning opportunities could be important for strengthening competency based assessment. However, the findings should not be interpreted as establishing a direct causal relationship, since the study design was not experimental.

In conclusion, the study established a strong positive relationship between teachers' continuous professional development and assessment practices in competency based education in secondary schools in Gulu City. All five TCPD constructs were positively and significantly associated with assessment practices, while the regression results showed that they jointly explained a substantial proportion of the variation in assessment practices. The findings therefore underscored the importance of strengthening formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support as components of a comprehensive TCPD system for supporting effective assessment practices in competency-based education.

5.5 Conclusion

(i) The study found that the level of teachers' continuous professional development (TCPD) was low among secondary school teachers in Gulu City. The findings showed limited engagement in formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support. Overall, the results indicated that teachers had limited opportunities for sustained and practical professional development related to the implementation of competency based education (CBE).

(ii) The study further found that the level of use of assessment practices, namely formative, summative, and continuous assessment, was moderate. Although teachers demonstrated some effort in applying diverse assessment strategies, their implementation remained inconsistent and was only partially aligned with competency based principles. Traditional examination-oriented approaches continued to persist, while formative and continuous assessment practices were not consistently or systematically applied to support learner competency development.

(iii) Finally, the study found a strong positive relationship between teachers' continuous professional development and their assessment practices. The findings showed that all five TCPD constructs were positively and significantly associated with assessment practices, while the regression analysis indicated that they jointly explained 69.9% of the variation in assessment practices. Therefore, higher levels of TCPD were associated with stronger assessment practices. Strengthening formal professional learning, collaborative learning, self-directed learning, reflective practice, and institutional support is therefore important for enhancing assessment practices and supporting the effective implementation of competency based education in secondary schools.

5.6. Recommendations

Based on the findings and conclusions of the study, the following recommendations were made:

(i) The Ministry of Education and Sports should strengthen policies and guidelines for teachers' continuous professional development (TCPD) and assessment in competency based education. Clear and standardised frameworks for professional development and assessment should be disseminated to secondary schools to promote consistent implementation. The Ministry should also strengthen collaboration with teacher training institutions and education partners to provide relevant and sustained professional development opportunities for teachers.

(ii) Secondary schools and teachers should strengthen the quality and consistency of assessment practices in competency based education. Teachers should be supported through practical training on the design and use of formative, summative, and continuous assessment, including rubrics, portfolios, projects, and performance-based tasks. Schools should also strengthen internal monitoring of assessment practices and provide adequate teaching and learning resources to enable teachers to assess learners regularly and provide meaningful feedback.

(iii) School leadership, particularly Headteachers and Directors of Studies, should provide stronger institutional support for TCPD and assessment practices. This should include allocating adequate time for professional development, facilitating teacher collaboration and peer learning, monitoring assessment practices, and supporting teachers to apply competency based assessment approaches. The Ministry of Education and Sports and other education stakeholders should provide adequate funding and logistical support to facilitate sustained professional development activities in secondary schools.

5.7 Suggestions for further studies

Future research should conduct a longitudinal mixed-methods study examining sustained, school-based teachers' continuous professional development (TCPD) programmes and their relationship with teachers' assessment practices and learners' competency attainment over time. Such a study could track teachers before, during, and after targeted TCPD interventions to examine changes in professional development and assessment practices and determine whether sustained professional development is associated with more consistent use of formative, summative, and continuous assessment, as well as improved learner outcomes in competency based education. Future studies could also employ experimental or quasi-experimental designs where appropriate to provide stronger evidence regarding causal relationships.

References

Guetterman, T. C., Plano Clark, V. L., & Molina-Azorin, J. F. (2024). Terminology and mixed methods research: A persistent challenge. Journal of Mixed Methods Research, 18(1), 3–13. https://doi.org/10.1177/15586898231217855

Guskey, T. R. (2002). Professional development and teacher change. Teachers and Teaching: Theory and Practice, 8(3), 381–391. https://doi.org/10.1080/135406002100000512

Hardman, F., Ackers, J., Abrishamian, N., & O'Sullivan, M. (2011). Developing a systemic approach to teacher professional development in Tanzania. Professional Development in Education, 37(5), 807–827. https://doi.org/10.1080/19415257.2011.593958

Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.

Heritage, M. (2010). Formative assessment: Making it happen in the classroom. Corwin.

Jackson-Gordon, R., & Plano Clark, V. L. (2024). Using a joint display for building integration in a sequential study: Informing data collection for a participatory second phase. Journal of Mixed Methods Research, 18(2), 137–146. https://doi.org/10.1177/15586898231179848

James, T. G., DeJonckheere, M., & Guetterman, T. C. (2024). Integrating transformative considerations and quantitative results through a participant selection joint display in explanatory sequential mixed methods studies. Journal of Mixed Methods Research, 18(1), 14–30. https://doi.org/10.1177/15586898221149470

Kanjee, A., & Mthembu, T. (2015). Assessment literacy of foundation phase teachers: An exploratory study. South African Journal of Childhood Education, 5(1), 142–165.

Kennedy, M. M. (2016). How does professional development improve teaching? Review of Educational Research, 86(4), 945–980. https://doi.org/10.3102/0034654315626800

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607–610. https://doi.org/10.1177/001316447003000308

Ministry of Education and Sports. (2017). Continuous professional development (CPD) framework and costed implementation plan. Government of Uganda.

Nakawuki, R. C., Kyasanku, C., & Tebenkana, T. (2025). Teachers' knowledge of CBC formative assessment practices in selected public secondary schools in Mpigi District, Uganda. East African Journal of Education Studies, 8(3), 666–689. https://doi.org/10.37284/eajes.8.3.3703

National Curriculum Development Centre. (2020). The lower secondary curriculum. Ministry of Education and Sports.

National Curriculum Development Centre. (2026a). Assessment framework for the Advanced Secondary Curriculum. Ministry of Education and Sports.

National Curriculum Development Centre. (2026b). Assessment guidelines for the Advanced Secondary Curriculum. Ministry of Education and Sports.

O'Sullivan, M. (2002). Reform implementation and the realities within which teachers work: A Namibian case study. Compare: A Journal of Comparative and International Education, 32(2), 219–237.

Okumu, J. B., & Opio, G. (2023). Continuous professional development and teachers improved pedagogical skills in secondary schools in Gulu City. East African Journal of Education Studies, 6(3), 430–440. https://doi.org/10.37284/eajes.6.3.1594

Piaget, J. (1952). The origins of intelligence in children (M. Cook, Trans.). International Universities Press.

Schildkamp, K., Poortman, C., Luyten, H., & Ebbeler, J. (2018). Factors promoting and hindering data-based decision making in schools. School Effectiveness and School Improvement, 29(1), 85–105. https://doi.org/10.1080/09243453.2017.1347034

Schildkamp, K., van der Kleij, F. M., Heitink, M. C., Kippers, W. B., & Veldkamp, B. P. (2020). Formative assessment: A systematic review of critical teacher prerequisites for classroom practice. International Journal of Educational Research, 103, Article 101602. https://doi.org/10.1016/j.ijer.2020.101602

Tabulawa, R. T. (2013). Teaching and learning in context: Why pedagogical reforms fail in sub-Saharan Africa. African Books Collective.

Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration. Ministry of Education.

Uganda Bureau of Statistics. (2025). National Population and Housing Census 2024: Acholi sub-region census profile. UBOS.

UNESCO. (2024). Global report on teachers: Addressing teacher shortages and transforming the profession. UNESCO.

UNESCO. (2025, August 7). Uganda's CPD framework: Empowering teachers through credit-based professional development. UNESCO.

Vroom, V. H. (1964). Work and motivation. Wiley.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

Wiliam, D. (2011). Embedded formative assessment. Solution Tree Press.

Worku, M., Melese, W., & Husen, A. (2025). The practices of continuous professional development for instructional quality of secondary school teachers in Woliso town,

Oromia region, Ethiopia. Discover Education, 4, Article 349. https://doi.org/10.1007/s44217-025-00810-1

Zami Atibuni, D., Muzaale, T., & Obong Capuc, F. (2024). The challenges of and strategies for competency based assessment by Uganda National Examinations Board. Journal of Curriculum Development, Evaluation, and Education, 1(1), 12–31. https://doi.org/10.64948/JCDEE.v1.i1.2024.5

Appendices

Appendix A: Questionnaire for teachers

I Emmy Godfrey Opiyo a Master's student from Gulu University will be carrying out research on *"Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City".* I request your participation by providing information as per the instructions. All information given will be treated with confidentiality and will only be used for only academic purposes. Thank you very much in advance for taking the time to share your understandings and experiences. Your contribution is highly valuable to this study.

Section A: Demographic information

1. Name of the school……
2. Respondent's designation:

Headteacher	**Deputy Headteacher**	**Directors of Studies**	**Teachers**

3. Gender: Male ☐ Female ☐

4. Age group of respondents:

20-30	**30-45**	**41-50**	**50 and above**

5. Years of teaching experience:

1-5	**6-10**	**11-15**	**16 and above**

6. Teaching subject (s):…….

7. Highest academic qualification:

Diploma ☐ B. Ed ☐ PGDE ☐ Masters ☐ Other ☐

SECTION B: Assessment practices in CBE

Instruction: Tick the option that best describes your view. Scale:

Strongly Disagree (SDA)	**Disagree (DA)**	**Not Sure (NS)**	**Agree (A)**	**Strongly Agree (SA)**
1	2	3	4	5

S/No	**Statement**	**SDA**	**DA**	**NS**	**A**	**SA**
		1	2	3	4	5
1	I use formative assessments such as quizzes, projects, and oral work regularly.					
2	I assess learners using competency-based approaches.					
3	I provide timely and constructive feedback to learners.					
4	My assessments reflect real-life situations as required by CBE.					
5	I use rubrics and scoring guides to assess learner competencies.					
6	Learner portfolios and projects are part of my assessment methods.					
7	Assessment practices in my school follow NCDC guidelines for CBE.					

SECTION C: Level of teachers' continuous professional development

S/No	**Statement**	**SA**	**A**	**DA**	**SDA**	**NS**
		1	2	3	4	5
1	The school provides regular TCPD programs.					
2	I have attended TCPD sessions related to CBE in the past 12 months.					
3	TCPD sessions have improved my understanding of CBE.					
4	TCPD has enhanced my ability to assess learner competencies.					
5	The school encourages teachers to attend external training workshops.					
6	TCPD activities are well-coordinated and well-facilitated.					

SECTION D: Open-ended questions

In your view, what are the most effective assessment practices in CBE?

……
……
……
……

What type of teacher training have you received on CBE assessment?

……
……
……
……

What challenges do you face in implementing CBE assessment practices?

……
……
……
……

In what ways can TCPD be improved to support CBE assessment?

……
……
……

Appendix B: Interview Guide for Headteachers

Introduction: your school has been chosen to take part in this study, *"Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City",* as a respondent. The information you provide will be treated with utmost confidentiality. Therefore, give the information you have to the best of your knowledge and ability.

1. What assessment practices are used in your school under CBE?
2. How would you describe the level of teacher participation in TCPD?
3. In what ways does TCPD influence assessment practices in your school?
4. What contextual factors (resources, staffing, and policy) affect TCPD and assessment?
5. What challenges do you face in supporting TCPD activities?
6. What strategies has the school put in place to strengthen assessment in CBE?

Appendix C: Interview Guide for Deputy Headteachers

Introduction: your school has been chosen to take part in this study, *"Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City",* as a respondent. The information you provide will be treated with utmost confidentiality. Therefore, give the information you have to the best of your knowledge and ability.

1. What is your role in supervising assessment practices in CBE?
2. How often do teachers participate in TCPD programmes?
3. Do teachers demonstrate improved assessment practices after training?
4. What factors hinder effective TCPD implementation?
5. In your view, how can assessment practices in CBE be improved?

Appendix D: Interview Guide for Directors of Studies (DOS)

Introduction: your school has been chosen to take part in this study, *"Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City",* as a respondent. The information you provide will be treated with utmost confidentiality. Therefore, give the information you have to the best of your knowledge and ability.

1. How do you coordinate assessment practices in your school?
2. Are teachers adequately trained to handle CBE assessments?
3. How does TCPD contribute to improving assessment quality?
4. What gaps still exist in teachers' assessment skills?
5. What contextual constraints limit the implementation of CBE assessment?

Appendix F: Document Review Guide

Introduction: your school has been chosen to take part in this study, *"Teachers Continuous Professional Development and Assessment Practices in Competency Based Education in Secondary Schools in Gulu City",* as a respondent. The information you provide will be treated with utmost confidentiality. Therefore, give the information you have to the best of your knowledge and ability.

Section A: Documents to be reviewed. (Tick appropriately).

S/N	Type of document	Available	Not available
1	Teachers' Schemes of Work		
2	Lesson Plans		
3	Assessment Records (projects, portfolios, assignments)		
4	CBE Assessment Rubrics / Scoring Guides		
5	Learner Progress Records		
6	TCPD Attendance Registers		
7	TCPD Reports / Minutes		
8	CPD Policy or Staff Development Plan		
9	Supervision Reports (internal monitoring reports)		
10	Records of External Workshops / Trainings		

SECTION B: Assessment practices in CBE

Not Evident (NE)	Slightly Evident (SE)	Moderately Evident (ME)	Evident (E)	Strongly (S)
1	2	3	4	5

S/No	Statement	Not evident	Slightly evident	Moderately evident	Evident	Strongly evident
		1	2	3	4	5
1	Use of performance tasks in assessment records					
2	Use of rubrics/scoring guides					
3	Evidence of learner competency assessment					
4	Use of learner portfolios /project-based work					
5	Alignment of assessment tasks with CBE learning outcomes					
6	Documentation of feedback provided to learners					

SECTION C: Contextual factors

S/N	Type of document	Present	Absent
1	Availability of instructional materials		
2	Staff workload documentation (timetable, duties)		
3	Records of resource constraints		
4	Administrative support (budgets, circulars, memos)		
5	Records showing teacher shortages or transfers		

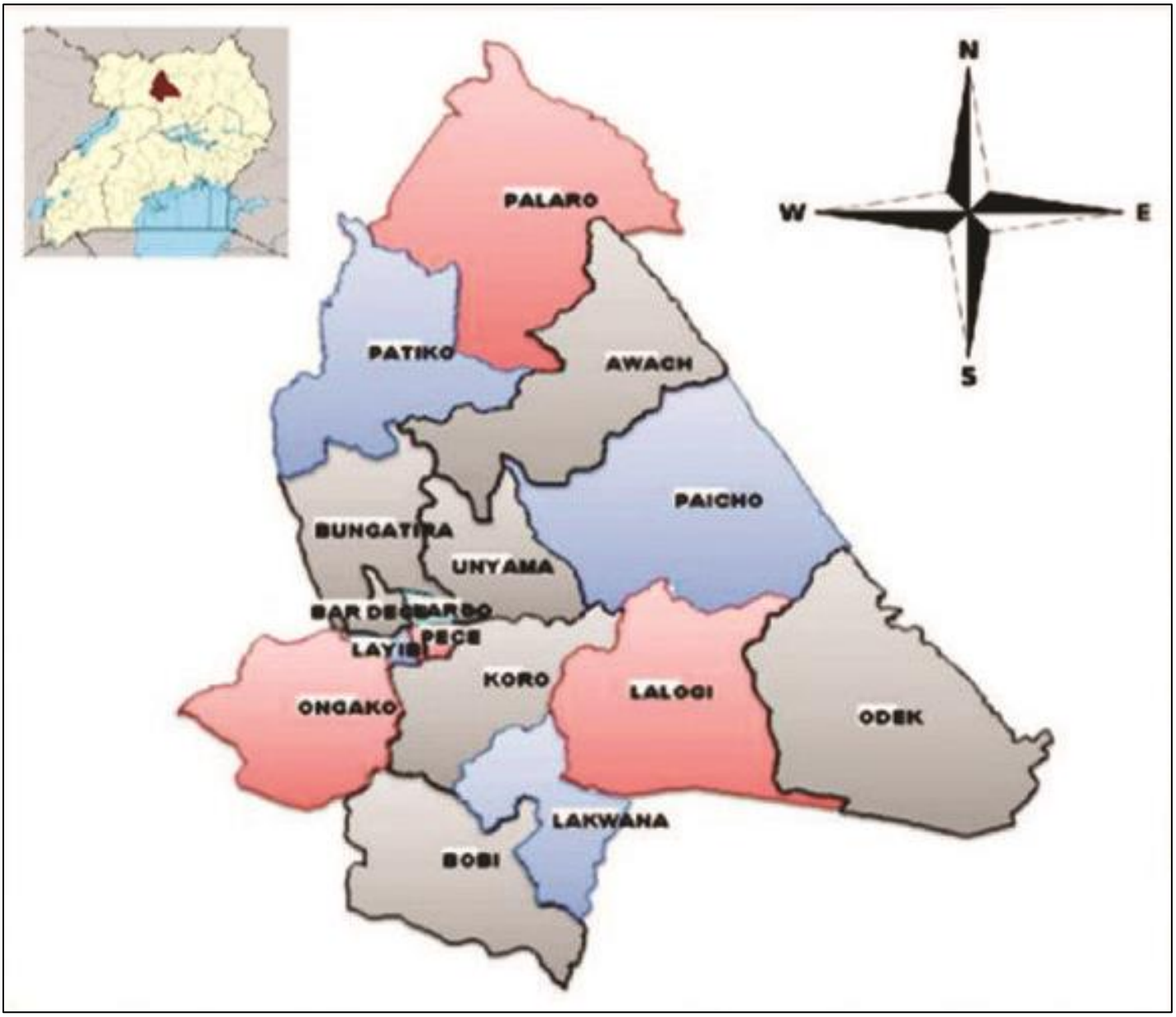
Appendix G: Research Budget

S/N	ACTIVITY	DESCRIPTION	ESTIMATED COST (UGX)
01	Stationery and printing	Questionnaires, interview guides, consent forms, report printing	1,200,000
02	Transportation	Travel to selected schools in Gulu City for data collection	1,800,000
03	Data collection allowances	Field allowances for research assistants	1,800,000
04	Internet/communication	Mobile data, calls, coordination with schools and respondents	600,000
05	Software/data analysis	SPSS license, Excel, NVivo or qualitative analysis software	700,000
06	Research assistance/support	Hiring research assistants for data analysis and entry	1,500,000
07	Pilot testing	Pre-testing of questionnaires and interview guides	600,000
08	Ethical clearance & admin fees	Institutional permissions, research clearance fees	1,200,000
09	Focus group discussion	Refreshments, venue, transport for participants	800,000
10	Contingency	Unexpected expenses or adjustments	825,000
11	Miscellaneous	Minor expenses not captured elsewhere (pens, folders).	500,000
	Total		**11,525,000**

Appendix H: Study Plan

S/N	Activity	Description	Duration	Timeframe	Responsible Person(s)
01	Proposal development	Finalize the research proposal	08 weeks	01 December 2025 – 25 January 2026	Researcher
02	Pilot testing	Pre-test research instruments in one school and revise tools	02 weeks	26 January 2026 – 08 February 2026	Researcher & Research Assistants
03	Ethical clearance	Obtain institutional permission and research clearance	01 week	09 – 16 February 2026	Researcher
04	Data collection	Administer questionnaires; conduct interviews and FGDs	02 weeks	16 February 2026 – 02 March 2026	Researcher & Research Assistants
05	Data entry and cleaning	Enter questionnaire data and organize interview transcripts	02 weeks	02 – 16 March 2026	Researcher & Research Assistants
06	Data analysis	Quantitative analysis (SPSS/Excel) and qualitative analysis (NVivo)	02 weeks	16 – 30 March 2026	Researcher
07	Report writing	Draft chapters (introduction, literature review, methodology, results, and discussion)	02 weeks	30 March 2026 – 13 April 2026	Researcher
08	Review and editing	Revise draft, proofread, and finalize the report	01 week	13 – 20 April 2026	Researcher
09	Submission	Submit the final report to the university	01 week	20 – 27 April 2026	Researcher

Appendix I: Sketch Map Showing Study Location



Appendix J: Krejcie and Morgan Table

Table for Determining Sample Size for a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970

Appendix K: Introductory Letter

GULU UNIVERSITY

P.O. BOX 166 GULU

TEL: +256471432922

OFFICE OF THE DEAN, FACULTY OF EDUCATION AND HUMANITIES

17th April 02026

TO : WHOM IT MAY CONCERN

This is to introduce to you Mr. Emmy Godfrey Opiyo (Reg No. 24/U/0689/MED/PS) a student pursuing a programme of study leading to an award Master of Education in Education Management of Gulu University, Master of Gulu University.

He is undertaking research on the Topic:

TEACHERS CONTINUOUS PROFESSIONAL DEVELOPMENT AND ASSESSMENT PRACTICES IN THE COMPETENCY BASED EDUCATION IN SECONDARY SCHOOLS IN GULU CITY.

Which is in partial fulfilment of the requirements for the award.

Any assistance rendered to him in relation to this research work will be highly appreciated.

GULU UNIVERSITY
17 APR 2026
FACULTY OF EDUCATION AND HUMANITIES

Yours faithfully,

For

Dr. Denis Thaddeus Ofoyuru

Dean, Faculty of Education and Humanities