

**PREDICTORS OF TEACHING QUALITY OF ACADEMIC STAFF IN
PUBLIC UNIVERSITIES IN UGANDA**

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DECLARATION

This dissertation is my original work and has not been submitted for a degree at any other university.

Signature.....

Date.....

APPROVAL

As university supervisors, we confirm that the candidate completed this work under our supervision.

Dr Wilson Mugizi

Signature.....

Date.....

Rev. Fr. Dr John Bosco Ssettumba

Signature.....

Date.....

DEDICATION

This work is lovingly dedicated to my late parents, Margaret and Joseph Kakyende, whose guidance taught me the importance of hard work, perseverance, and the value of respecting both the young and the elderly. I also dedicate this work to my late husband, whose intellectual achievements may not have been as extensive as mine, yet he continuously encouraged me to further my studies. Lastly, I dedicate this work to my wonderful children, with the hope that it inspires them to pursue their personal and academic aspirations with dedication and ambition.

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LIST OF ABBREVIATIONS AND ACRONYMS

B. ED: Bachelor of Education

DTE: Diploma in Teacher Education

ITEK: Institute of Teacher Education Kyambogo

KyU: Kyambogo University

M. ED: Master of Education

MoES: Ministry of Education and Sports

PD: Professional Development

PhD: Doctor of Philosophy

PLS: Partial Least Squares

REC: Research Ethics Committee

SPSS: Statistical Package for the Social Sciences

TDMS: Teacher Development and Management Systems

UNCST: Uganda National Council for Science and Technology

ABSTRACT

This study probed the predictors of teaching quality among academic staff in Ugandan public universities. Specifically, it explored how teacher self-efficacy mediates the impact of instructional leadership on teaching quality. The research design employed a cross-sectional correlational approach, garnering data from 253 respondents through self-administered questionnaires. Descriptive statistics revealed that academic staff exhibited high levels of self-efficacy and teaching quality. Further analysis using partial least squares structural equation modelling disclosed that instructional leadership and teacher self-efficacy positively predicted teaching quality. Notably, instructional leadership fostered teacher self-efficacy, which fully mediated its relationship with teaching quality. The findings underscore the critical role of instructional leadership in enhancing teaching quality, with teacher self-efficacy emerging as a pivotal factor. To optimise teaching quality, university leaders must prioritize instructional leadership that bolsters teacher self-efficacy, while academic staff should strive to cultivate their own self-efficacy. Ultimately, this study highlights the need for a synergistic approach, where university leaders' instructional leadership is informed by academic staff members' self-efficacy, to foster exceptional teaching quality.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In a world defined by constant change and rapid advancements, educational institutions must maintain high teaching standards that align with evolving demands. This is essential because teaching quality motivates students to fully participate in learning (Sogunro, 2017), maintains an interest in learning, and enhances students' education results or performance (Bellens et al., 2019). Students that get excellent instruction can reach their full potential at their own speed, acquire a thorough comprehension of the material, and practice skills that help them reach their personal objectives (Nilsen & Gustafsson, 2016). This research posits that academic staff self-efficacy and instructional leadership are pivotal predictors of teaching excellence among faculty members at Ugandan public universities. Moreover, the study suggests that teacher self-efficacy acts as a crucial intervening variable, mediating the influence of instructional leadership on instructional quality and ultimately shaping the quality of instruction delivered by academic staff.

1.1 Background

1.1.1 The Historical Standpoint: Much attention to quality dates back to ancient societies, when traders and artisans had to guarantee the calibre of their products to preserve their good name and win over customers. As a quality control measure, artisans in feudal Europe established societies to examine their creations before delivering them to clients (Chivasa et al., 2021). The idea of quality in education dates back to the early years of American education, when the "Act for the Advancement of Learning" (a Massachusetts law passed in 1647) acknowledged the value of teacher support and supervision as quality measures to guarantee successful instruction (Minnear-Peplinski, 2009). The law mandated the towns to set up schools and charged community leaders with the duty to supervise the schools to ensure that students read and understood the religious doctrine (Wakutile, 2019). The community members worked on guidelines for the religious curriculum development and disciplining students. They also recruited teachers, believing that their duties and performance would be in line with the community needs.

In the 1700s, the clergy ensured quality in American town schools, based on their capability and vast experience in supervising the teachers' religious instructional processes (King, 2020). The first school inspectors were recruited by the government of the United Kingdom in 1837 to keep an eye on teachers' performance (Jeong, 2009). The "National Society for Promoting the Education of the Poor" was founded in 1764 with the goal of enhancing education for underprivileged children. That organisation also laid the groundwork for future quality control efforts and by the early. In the 19th century, the British government had begun to take a more active role in education (Gillard, 2018). The Elementary

Education Act of 1870, sometimes referred to as the Forster's Education Act, created school boards to regulate local education and mandated compulsory education for children ages 5 to 13. In order to effectively oversee instructors' performance, the Act significantly expanded the inspectorate. The children's performance on exams, such as reading and mental math assessments, determined the teachers' compensation (Doherty, 2012).

The Elementary Education Act of 1882 then established an inspection system to make sure schools were fulfilling the bare basic requirements. In education, that signalled the start of a more structured quality control system (Evertsson, 2022). The more extensive quality control procedures that came later in the 20th century, such as the creation of the Office of OFSED in 1992, were made possible by those early developments (Naz, 2023). In addition, the level of education in Europe changed significantly between 1900 and 2000. By the late of the nineteenth century, all Western European nations had embraced mass education, marking a watershed moment in the region's educational history. At the close of the 20th century, three key trends shaped the modern education systems which included centralization, secularization and subsidization.

Power shifted from local to national authorities; control moved from the church to secular entities; and, the state became the primary funder of schools. North America, Australia, New Zealand, and a few Northern and Western European nations were leading the way in the expansion of schooling by 1900. Japan and Thailand also made significant advancements in basic education during that time (Zinkina et al., 2016). As the 20th century progressed, European schools continued to evolve, with a growing emphasis on comprehensive education, diversity and inclusivity.

Despite challenges and variations in quality across regions, the European schools made significant progress in providing access to education and improving educational outcomes for their students (Gausas, 2022). Because education was not primarily focused on business, the higher education instructional quality was taken into consideration later (Kuklinska et al., 2015). Prior to research becoming mandatory in universities (Henard & Leprince-Ringuet, 2008), teaching was the primary function of universities until the end of the 19th century (Schimank & Winnes, 2000). Teaching lost its prominence in the 20th because of a directive by the United Kingdom (UK) government that required universities to focus more on research hence, the uptake of the Humboldtian university model. The model which emerged in the early 19th century at Humboldt University emphasised combining research and studies (Klasová et al., 2019).

When giving prominence to research, teaching largely received limited attention with focus on research (Henard & Leprince-Ringuet, 2008). Later, with higher education growth, expansion and development, the significance of teaching was re-evaluated and scrutinised. Consequently, countries demanded for quality instruction and they advised the higher education institutions to make sure that the learning the students experienced was comparable to the funds their parents spent on fees (Henard & Leprince-Ringuet, 2008). The awarding of teaching excellence was one modern strategy to support high-quality education in the West (Israel & Bennett, 2018). For instance, since 1981, the US Carnegie Foundation had recognized more than 500 faculty members with its US Professors of the Year award, and since 2000, the UK's National Teaching Fellowship Scheme had recognized more than 1,000 outstanding educators (Lee and Johnes, 2022).

Similarly, according to a National Survey of Student Engagement (NSSE) research, 90% of US institutions used student assessments to gauge the quality of their instruction (Ewell & McCormick, 2020). Similarly, assessments of students were another strategy whereby 90% of US institutions used student assessments to evaluate the calibre of their instruction, per a NSSE study (Ewell & McCormick, 2020). Peer review is a useful tool for enhancing quality and according to research conducted by the Canadian Association of University Teachers, it was the primary method used by 75% of the Canadian universities to evaluate teaching. 71% of US universities employ learning analytics measures to raise student achievement, per research by the Educause Learning Initiative (ELI, 2020).

Throughout the colonial era in Africa (1900–1960s), education was mostly funded by the colonial powers, who trained Africans for subservient positions in the colonial government. However, quality control was also severely constrained, and access to education was restricted. Following their independence, several African nations increased access to education by emphasizing primary education for all. Nevertheless, the lack of resources, teacher training, and adequate infrastructure made quality control a challenging task (Cogneau et al., 2021). In the 1980s and 1990s, structural adjustment programs implemented by the World Bank and IMF led to decentralization, greater privatization, and a reduction in government funding for education. Consequently, quality control suffered and many schools were left without basic supplies. But beginning in the 2000s, a number of African nations implemented reforms aimed at raising the standard of education which included financial increases, teacher training, and curriculum modifications.

Quality control measures including school evaluation and national assessment were put in place (Ward et al., 2022) for example, the African Union's Education Sector Policy (2007), the United Nations' Education for All (EFA) initiative (1990-2015), the World Bank's Education Strategy (1999-2010) and the African Development Bank's Education Program (2004-2013). Those were notable initiatives and organizations that contributed to improving education quality control in Africa and despite the ongoing challenges, these efforts had improved education quality and access in Africa (UNICEF, 2021). Currently in place to guarantee high-quality instruction at universities, are networks, councils, boards, commissions, and frameworks at continental and country level. The African Universities' Quality Assurance Framework serves as a regional benchmark for overseeing and ensuring the maintenance of quality standards in higher education.

For instance, Senegal faced challenges with low efficiency in higher learning institutions, as reflected in high repetition and dropout rates, along with minimal student retention (Seck, 2013). Although some goals of higher education embrace enhancement of instructional skills, evoking the power of the mind and balancing research and teaching, Nigerian institutions of higher learning did not give the students opportunity to think analytically (Usoro, 2016). Subsequently, studies in Kenya revealed that most universities had problems with teaching and learning, with insufficient lecturers having a detrimental effect on university techniques (Jebungei & Kerei, 2022). Further still, there was an emerging tendency related to undesirable staff work culture that was reflected in the lack of devotion and engagement in innovative teaching approaches.

In Uganda, the system of education in the 1960s was one of the best in Africa (Malunda et al; 2021) where learners were taught in a participatory and interactive way that evoked higher-order thinking skills. The graduates acquired relevant knowledge and they were practically taught sufficient skills that were geared towards obtaining appropriate jobs (Ssekamwa (1997). In addition, there were very good services across higher education institutions for example, they were adequately funded and very well governed; the academic staff were highly qualified and sufficiently paid (Hyuha et al. 2017). However, due to political turmoil, civil conflicts and wars in the 1970s, little or no attention was paid to educational institutions; leading to the deterioration of education quality at all levels. The morale of who endured the unfavourable circumstances declined, and some university academics and teachers left to other nations, which had a substantial influence impact on the teaching quality (Malunda et al., 2021).

A pivotal milestone in Uganda's higher education landscape was achieved in 2001, when the government enacted the Universities and Other Tertiary Institutions Act. This legislation paved the way for the establishment of the National Council for Higher Education (NCHE), tasked with elevating the standards of postsecondary education and driving national development (Kasozi, 2019). The NCHE was tasked with regulating the establishment of new institutions, managing their operations, and ensuring compliance with educational standards (Kalanda et al., 2021). Under this Act, the National Council for Higher Education was tasked with accrediting higher education programs and institutions to ensure they met the minimum standards for quality instruction to conduct regular quality assurance assessments, keeping an eye on instruction quality and offering feedback for improvement; to establish standards and guidelines for

instruction, learning and assessment, directing institutions to maintain quality instruction; to carry out institutional audits, assessing governance, management, and instruction quality; guarantee that institutions provided sufficient student support services, such as mentorship and counselling; to encourage research and innovation, motivating institutions to incorporate research into teaching; and, to foster international partnerships, exposing Ugandan academics to global best practices in instruction.

Despite the existence of the NCHE, the standard of teaching quality remained low in the public universities for instance, some academic staff absented themselves and taught only 50% of the programmes teaching periods (Atwebembeire et al., 2018) and few academic staff were employing the student-centred approach to teaching (Muganga & Ssenkusu, 2019). Due to the importance of teaching quality, there were several studies on the same, carried out by different scholars. For instance, Nabaho et al. (2016) in their research at Makerere University, found that the following elements influenced the quality of instruction: pedagogical training, competence-based deployment, student evaluation of instruction, acknowledgment of instruction, and interaction with academic staff. In a study conducted in Arusha, Tanzania, Nyangarika and Ngasa (2020) found that classroom instruction was modified by instructional leadership.

Research from diverse contexts underscores the significance of instructional leadership and teacher self-efficacy in shaping teaching quality. For instance, a study in East Java Province, Indonesia, revealed that instructional leadership had a profound impact on instructional quality (Bafadal et al., 2018). Similarly, a UK-based study demonstrated a robust correlation between teacher self-efficacy and teaching excellence (Buric & Kim, 2020). Furthermore,

Malunda's (2017) research highlighted the positive influence of instructional supervision on teaching quality. A comparative analysis across OECD member countries also confirmed the strong positive relationship between instructional leadership and teaching quality (Bellibaş et al., 2020). The aforementioned research looked at the variables that affect the quality of instruction. These elements include teacher efficacy (Buric & Kim, 2020), pedagogical methods (Malunda, 2017), and instructional leadership (Anthony & Ngasa, 2020; Bafadal et al., 2018; Bellibaş et al., 2020). Nevertheless, a contextual gap arose because, except for the study by Malunda (2017), all the other studies were in contexts outside Uganda. More still, Malunda's study covered secondary school contexts leaving the situation in universities unexplored. Given the knowledge gap in the Ugandan context, this study aimed to investigate the impact of instructional leadership on teaching quality within public universities. Building on existing research, this investigation explored a novel dimension by examining the mediating role of self-efficacy in the relationship between instructional leadership and teaching quality, a critical aspect that had not been previously explored in Ugandan institutions.

1.1.2 The Theoretical Perspective: Two theories namely Instructional Leadership Theory (ILT) and Social Cognitive Theory (SCT) underpinned this study. Hallinger and Murphy (1985) developed the ILT based on their management and teaching paradigm, which considered instructional leadership an essential as well as pertinent type of leadership (Munna, 2021) that directly impacted curriculum and teaching practices and saw instructional leaders as persons who promote an institution's effectiveness, particularly the teaching quality (Kurnia & Purwanto, 2021). According to Lui et al. (2017), curriculum coordination, professional

development instructional supervision, and student progress monitoring are the primary instructional leadership areas. Professional development, curriculum coordination, instructional supervision, and student progress monitoring are the core areas of instructional leadership (Lui et al., 2017). Instructional leadership theory proposes that when the leader provides instructional leadership, the teachers' professional development and visibility are enhanced thus, promoting the teaching quality (Kurnia & Purwanto, 2021).

Therefore, basing on the ILT, this study examined how the four instructional leadership domains influenced the teaching quality. However, the ILT strictly addresses instructional leadership but does not consider factors that psychologically affect the teaching quality like teaching efficacy. Consequently, self-efficacy as a mediator, was supported by the Social Cognitive Theory (SCT). The main factors influencing behaviour are explained by Bandura's SCT (1986). The Social Cognitive Theory (SCT) emphasises that outcome expectations and self-efficacy are the primary drivers of behavioural change. As noted by Eller et al. (2018), outcome expectations refer to an individual's mental framework regarding the potential benefits and consequences of engaging in a particular behaviour. Conversely, self-efficacy encompasses an individual's confidence in their ability to execute tasks proficiently and achieve desired outcomes.

Research by Bajaba et al. (2021) suggests that individuals with high self-efficacy tend to be more motivated to engage in activities that align with their goals, which, for higher education instructors, translates to delivering exceptional teaching experiences. A comprehensive study by Nie et al. (2012) explored the multifaceted nature of teaching self-efficacy, encompassing aspects such as instructional strategies, classroom management, and motivational techniques.

Grounded in Social Cognitive Theory (SCT), this research investigated the interplay between academic staff's self-efficacy and teaching quality, as well as the mediating role of self-efficacy in the relationship between instructional leadership and teaching excellence.

1.1.3 Conceptual Perspective: The study's concepts were self-efficacy (mediating variable), instructional leadership (independent variable), and teaching quality (dependent variable). Teaching quality involves delivering instruction that meets students' learning needs, styles, interests, and expectations while adhering to established standards (Sogunro, 2017). Luoto (2020) conceptualizes teaching quality as the pedagogical practices that instructors employ to enrich students' learning experiences, ultimately leading to enhanced academic outcomes. Similarly, Jentsch and Schlesinger (2017) define teaching quality as a multifaceted construct that integrates essential elements such as effective classroom management, intellectually stimulating instruction, and the cultivation of a supportive and inclusive learning environment. The management of a classroom includes a full range of administrative duties performed by a teacher in the classroom.

Similarly, Megawati et al. (2020) emphasise that teaching quality is also reflected in teachers' ability to maximise time spent on academic activities while curtailing time spent on non-academic tasks and assess their effectiveness in running the classroom and delivering instruction. On their part, Ahmad et al. (2022), classroom management encompasses all of the arrangements a teacher makes to arrange students, time, space, and materials in a way that promotes effective learning. Albayrak and Ateskan (2022), describe classroom management as the actions and instructional strategies used by the teacher to

establish an assuring learning environment that enhances and promotes enthusiastic involvement in academic and social-emotional learning. Additionally, Setyaningsih and Suchyadi (2021) stated that the management of classroom entails instituting and maintaining a conducive environment for students to work both independently and together to achieve personal goals. According to Senten et al. (2022), classroom management entails reducing disruptions and indiscipline problems, controlling time, keeping an eye on every part of the classroom, and making rules and procedures clear.

Cognitive activation refers to a set of instructional strategies designed to foster students' critical thinking and constructive learning, ultimately enriching their subject-specific knowledge base (Wang et al., 2021). By presenting students with challenging tasks, such as activating prior knowledge, exploring thought-provoking questions, and engaging in critical discussions, cognitive activation aims to enhance learners' cognitive functioning and promote deeper understanding of the material (Teig et al., 2019). Furthermore, Exintaris et al. (2023) highlight that cognitive activation encompasses pedagogical approaches that stimulate complex thinking, problem-solving, and engagement, leveraging these strategies to optimize student learning outcomes. Students' social interaction experiences and tasks that challenge their prior knowledge, higher order thinking, and metacognition are all included in cognitive activation (Stanton et al., 2021).

Student support, it refers to the attention, assistance, criticism, and guidance that the instructor gives the students (Vidića, 2023). Perceptions of teachers' attitudes and behaviours toward their academics and daily life are known as student support (Inniss, 2023). Additionally, social resources in the teacher-student connection are what enable pupils to overcome adversity or deal with

difficult school-related assignments (Ulmanen et al., 2023). According to Ndobe et al. (2024), student support involves offering individualized and differentiated help, controlling the pace of instruction, addressing student mistakes in a constructive manner, giving pertinent and constructive feedback, demonstrating interest in students' performance, and establishing opportunities to meet their fellow teachers, and teachers to meet students.

Regarding instructional leadership, the independent variable, it refers to the leaders' activities that have a direct bearing on instruction, like lesson observation, as well as activities that have an indirect impact on students' learning, including scheduling and school culture (Munna, 2023). According to Xhomara (2021), instructional leadership encompasses the critical role that school administrators play in guiding and supervising educational activities, with a primary focus on promoting effective teaching and learning practices. Mora-Ruano et al. (2021) expand on this definition, describing instructional leadership as encompassing activities such as planning, assessment, and coordination of instruction, with an emphasis on collaborative teamwork aimed at enhancing teaching quality. McBrayer et al. (2019) offer a practical view of instructional leadership, highlighting tasks like curriculum coordination, monitoring student progress, professional development, and instructional supervision (Mourão et al., 2022). Maisyaroh et al. (2021) define instructional supervision as the process of guiding, directing, and providing opportunities for professional growth to educators, with the goal of enhancing the teaching and learning environment.

Ashun and Acquah (2021) define instructional supervision as the process by which administrators of educational institutions monitor, appraise, and guide the teachers to ensure that the institutions achieve their objectives. Instructional

supervision is an activity chosen by a school that influences teachers' behaviour thus, enhancing instruction and realisation of educational institution's goal. Therefore, curriculum coordination is the process of putting together efficient plans for teachers to deliver teaching and assess students utilizing resources tailored to the curriculum (Nevenglosky et al., 2018). University leaders play a vital role in orchestrating curriculum implementation, a key strategy for enhancing teaching excellence and ultimately elevating the quality of education provided (Nevenglosky et al., 2018). According to Palestina et al. (2020), implementation of curriculum is the real teaching of the content and is a coordination responsibility of an instructional leader.

According to Alshehry (2018), teacher professional development is an ongoing process aimed at enhancing the educational experience for both instructors and students. Su and Wang (2022) suggest that professional development refers to the improvement of one's knowledge and abilities. Tracking the advancement of pupils in their academic pursuits is known as monitoring their progress (Klapproth et al., 2022). Progress monitoring, according to Fuchs and Fuchs (2011), is the process by which teachers evaluate students' academic performance to ascertain whether they are benefiting suitably from the standard instructional program and to create more efficient programs for those who are not receiving enough benefit from self-efficacy serves as a mediating variable, representing an individual's conviction in their capacity to successfully execute their professional obligations, overcome challenges, and make informed decisions that drive positive outcomes (Barni et al., 2019). Similarly, Hidayah et al. (2023) conceptualise self-efficacy as an individual's faith in their ability to

exert control over their environment, navigate complex situations effectively, and ultimately achieve desirable results.

. According to Yurtdakal and Karakas (2021), instructors' self-efficacy is based on their conviction that they can plan and carry out instructional activities that would help students meet the established learning objectives.

Sibagariang and Pandia (2021) state that teachers are confident in their ability to involve students in learning activities, even when faced with obstacles such as low motivation. In addition, Suman (2021) suggest that instructional strategies are generalized lesson plans that comprise objectives, organization, and a list of prepared techniques required to carry out the strategies. Further, Davidovitch and Dorot (2023) describe motivation as the power that propels people to accomplish their goals and act in a particular manner in a particular circumstance. Andreou et al. (2022) emphasise that teachers' self-efficacy is a critical factor in their ability to foster student engagement and drive achievement of learning objectives.

Moreover, research suggests that self-efficacy operates as a powerful internal motivator, exerting a profound influence on teachers' instructional quality and, ultimately, shaping the learning experiences of their students (Kholifah et al., 2023). Nie et al. (2012) conceptualize teacher efficacy as a multifaceted construct encompassing motivational techniques, instructional approaches, classroom management strategies, and an individual's personal confidence in their teaching abilities. Similarly, Yough (2019) defines a teacher's sense of effectiveness as their conviction in their capacity to boost student motivation, academic achievement, and overall engagement, particularly when working with students who present unique challenges. Similarly, Barni et al. (2019) emphasize that it reflects a teacher's confidence in managing their responsibilities successfully and

overcoming obstacles in their profession. The idea explains how people view and believe they can accomplish a certain level of achievement and how they may handle obstacles and challenges to guide their behaviour (Alibakhshi et al., 2020). The capacity of teachers to set clear behavioural standards and encourage students to behave appropriately through a variety of strategies is known as behaviour management (Shah, 2023).

Kumar and Liu (2019) indicate that behaviour management denotes the teachers' actions to create an environment that supports students' academic and socioeconomic learning (Kumar & Liu, 2019). Mitchell (2019) posits that behaviour management refers to the steps taken by the instructor to maintain order, encourage collaboration from the students, encourage active learning, and inspire self-motivation. Conversely, instructional strategies are methods teachers employ to help pupils develop into autonomous, strategic learners (Crebillo, 2021). According to Baafi (2020), instructional strategies are methods and approaches that educator use to help pupils learn. Suman (2021) explain that instructional strategies are generalized lesson plans that comprise objectives, organization, and a list of prepared techniques required to carry out the strategies. According to Davidovitch and Dorot (2023), motivation is the power that propels people to accomplish their goals and act in a particular manner in a particular circumstance.

1.1.4 Contextual Perspective: This study was conducted in four public universities, carefully selected from a total of ten institutions, namely Busitema, Gulu, Kabale, Kyambogo, Lira, Makerere, Mountains of the Moon, Muni, Soroti, and Mbarara University of Science and Technology (NCHE, 2021). To ensure geographical diversity the research focused on Makerere University in Central Uganda,

Busitema University in Eastern Uganda, Gulu University in Northern Uganda, and Mbarara University of Science and Technology in Western Uganda. As key players in the country's higher education landscape, these institutions are mandated to provide high-quality education that addresses pressing social and economic needs within their respective communities, as stipulated in the Uganda Universities and Other Tertiary Institutions Act (2001).

In accordance with this regulatory framework, the National Council for Higher Education undertakes periodic quality assurance evaluations and accredits higher education institutions and programs, thereby ensuring compliance with the requisite standards for providing high-quality education and upholding academic excellence while maintaining oversight of instructional quality and offering feedback for improvement; establishes standards and guidelines for instruction, learning, and assessment, directing institutions to maintain quality instruction; carries out institutional audits, assessing governance, management, and instruction quality; guarantees that institutions provide sufficient student support services, such as mentorship and counselling; encourages research and innovation, motivating institutions to incorporate research into teaching; and, it fosters international partnerships, exposing Ugandan academics to global best strategies in instruction.

In its 2018/2019 report on the state of higher education and training in Uganda, the National Council for Higher Education (NCHE) emphasized the need for universities to prioritize infrastructure development, specifically upgrading lecture halls, libraries, and laboratory facilities, to elevate the quality of instructional delivery and foster a more conducive learning environment. The research also suggested creating a purposeful policy to encourage staff training to

improve their teaching abilities. The universities offered instructional leadership and improved academic staff self-efficacy in identifying their teaching excellence, implementing learners' evaluations of their instruction, supervising instruction, assigning qualified academics, and interacting with students and academic staff in order to guarantee teaching quality (Nabaho al., et 2016).

In addition, the institutions provided training workshops, seminars, and scholarships to their academic staff to enhance their professional development (Wakida et al., 2017). Even with the efforts made by the NCHE and institutions to enhance instructional quality, the teaching standards in the country's public universities continued to face significant criticism. For instance, the NCHE (2022/2021) reported that the lecturer-to-student ratio was excessively high, at 1:100 or more, which contributed to a lack of digital resources, outdated technology, and insufficient instructional tools, resulting in teacher-centred teaching. Additionally, just 50% of the faculty members held a master's degree or higher, while most were bachelor's degrees holders, highlighting a deficiency in qualifications. In addition, few lecturers had training in teaching techniques. NCHE (2022/2021) further reported that there was inadequate pedagogical training, which accounted for the antiquated and ineffectual teaching approaches.

Further, there was limited curriculum relevance and high staff turnover, which was reflected in the frequency of lecturer departures that disrupted the students' learning flow and continuity; inadequate assessment methods that resulted in an overreliance on summative examinations with little use of continuous assessment, and feedback; and, inadequate student support, which reflected limited opportunity for students' mentorship, guidance, and counselling services. Furthermore, research has revealed that some academics were frequently

absent, resulting in a significant shortfall in instructional time, with some programs receiving only half of the required contact hours (Atwebembeire et al., 2018). Others failed to plan for lectures but depended on online plagiarised content to teach (Mugizi et al., 2015). Few academic staff members used student-centred techniques, and the quality of instruction was poor (Muganga & Ssenkusu, 2019).

The students were also exposed to teacher-centred practices (Muganga & Ssenkusu, 2019). In addition, the 2019 Education Sector Annual Performance Review report on higher education sub-sector proposed the need for re-training and re-tooling unemployed graduates which suggested that there was prevalence of poor teaching quality in the universities. Despite concerted efforts by universities to provide instructional leadership and ongoing professional development, aimed at bolstering the effectiveness and teaching prowess of academic staff, the overall quality of teaching remained below the required standard. This persistent shortfall underscored the need for a comprehensive examination of the factors influencing teaching quality, with a specific emphasis on the interplay between instructional leadership and self-efficacy in shaping teaching outcomes within Uganda's public university sector.

1.2 Statement of the Problem

All educational institutions are built on the foundation of high-quality instruction (Kurzweil, 2018). Excellent instruction enables students to practice skills that support the accomplishment of personal objectives and to develop a thorough comprehension of the subject matter (Deunk et al., 2018). The academic staff at Ugandan institutions has been working to improve their teaching quality since they understand how important it is. For example, by recognizing exceptional

teaching, adopting learners' evaluations of teaching, supervising teaching, and interacting with both academic staff and students; ensuring the universities provided leadership and augmented the efficacy of academic staff (Nabaho et al., 2016). Additionally, the institutions offered training through workshops and seminars as well as scholarships for the academic staff's professional growth (Wakida et al., 2017).

Despite these efforts to promote the teaching quality, it remained low in public universities. The NCHE (2022/2021) indicated that the ratio of lecturers to students can reach 1:100 or more, leading to a shortage of digital tools, outdated technology, and inadequate teaching materials, which are factors that may contribute to a lecturer-dominated approach to instruction. There was also evidence of the lecturers' insufficient qualifications; just half of them hold a master's or higher degree, and the majority merely held a bachelors. The NCHE (2022) also noted that there was insufficient pedagogical training, which explained the outdated and ineffective teaching approaches already noted, given how few lecturers received training in teaching strategies.

In addition, the NCHE (2022) pointed out low student support which was demonstrated by the lack of opportunities for students to receive mentorship, guidance, and counselling services; low assessment methods that lead to an overreliance on summative exams with little use of ongoing assessment and feedback; and high staff turnover, which was reflected in the frequency of lecturer departures that disrupted students' learning flow and continuity. The Education and Sports Sector's Annual Performance Report on the Higher Education Sub-sector (MoES, 2019) recommended the need for retraining and reskilling unemployed graduates. This implied that the standard of instruction in the

universities was insufficient to generate employable or self-employed students. Furthermore, many faculty members at public universities skipped half of their contact hours with students (Atwebembeire et al., 2018).

Moreover, the majority of academic staff employed teacher-centred approaches, which did not enhance students' cognitive abilities, resulting in poor teaching quality (Muganga & Ssenkusu, 2019). Teachers required learners to strictly follow existing rigid rules of conduct and to work noiselessly and independently except if told to act otherwise (Ludigo, 2020). In addition, the teaching practices used stifled independent learning of the learners, hence low cognition. Failing to rectify the issue of substandard teaching would perpetuate a cycle of underachievement among university students. This research sought to investigate the complex interplay of factors impacting teaching quality, with a particular emphasis on the pivotal role of instructional leadership and its indirect influence through teacher self-efficacy in Uganda's public university sector.

1.3 Purpose

The research aimed to explore the nexus between instructional leadership and the quality of teaching among academic staff, with teacher self-efficacy acting as a mediator, in public universities in Uganda.

1.4 Objectives

This study pursued four primary objectives:

1. To examine the predictive capacity of instructional leadership on teaching quality among academic staff in Uganda's public universities.
2. To investigate the extent to which instructional leadership influences the self-efficacy of academic staff in Uganda's public universities.

3. To determine whether teacher self-efficacy serves as a significant predictor of teaching quality among academic staff in Uganda's public universities.
4. To explore the mediating role of teacher self-efficacy in the relationship between instructional leadership and teaching quality among academic staff in Uganda's public universities.

1.5 Hypotheses

This study was guided by the following hypotheses:

H1: There is a positive and significant relationship between instructional leadership and teaching quality among academic staff, such that stronger instructional leadership predicts higher teaching quality.

H2: Instructional leadership has a positive and significant impact on the self-efficacy of academic staff.

H3: A significant and positive correlation exists between self-efficacy and teaching quality among academic staff, indicating that higher self-efficacy predicts better teaching quality.

H4: Teacher self-efficacy plays a mediating role in the relationship between instructional leadership and teaching quality, suggesting that instructional leadership influences teaching quality indirectly through its impact on teacher self-efficacy.

1.6 Scope of the study

1.6.1 Geographical: The study covered Uganda's 10 public universities, which are spread across the country's four key regions: Central, Eastern, Northern, and Western. To guarantee broad regional representation, the research selected four universities including Makerere University (Central), Busitema University

(Eastern), Gulu University (Northern), and Mbarara University of Science and Technology (Western).

1.6.2 Content scope: The dependent variable was examined through the lens of three key dimensions: classroom management, personalized learning support, and cognitive activation. Collectively, these aspects formed the core of the teaching quality construct, which served as the primary focus of the analysis. Curriculum coordination, student progress tracking, instructional evaluation, professional development, and instructional supervision were all taken into account when evaluating instructional leadership, the independent variable (IV). A mediating variable, teacher self-efficacy, was conceptualised as a multifaceted construct encompassing four key domains: personal sense of efficacy, behaviour management efficacy, instructional strategies efficacy, and motivational strategies efficacy.

1.6.3 Time scope: This study employed a cross-sectional research design, aligning with the research onion framework proposed by Saunders et al. (2019). As per this framework, the study's time horizon was synchronised to capture a snapshot of the phenomenon, in contrast to a longitudinal approach which would have involved tracking changes over an extended period. Cross-sectional studies examine data from a population at a single point in time using observational methods. These studies are useful for describing group characteristics, identifying factors that influence a research problem, and measuring the prevalence of specific findings. Compared to other forms of observational research, cross-sectional studies do not keep track of participants across time. They are useful in identifying preliminary data for future in-depth investigation, simpler to complete, and less costly (Wang & Cheng, 2020). Therefore, the study's time

frame was January through March 2024, which allowed for sufficient time for data collection and analysis.

1.7 The Significance of the Study

This research makes a valuable contribution to the existing literature, enhancing our understanding of the factors under investigation. This is a starting point for more research that may yield more understandings and findings on these variables. By pursuing novel lines of investigation, this study could lead to significant progress in the field and promote a deeper comprehension of the topic and its applicability to real-world situations. The study's identification of instructional leadership techniques that can improve academic staff teaching quality practices that university administrators can use as a benchmark makes it significant for boosting teaching quality in public universities.

Furthermore, the study findings provide baseline information for developing appropriate teaching quality and instructional leadership policies tailored to universities and other tertiary institutions' educators as well as managers. In addition, the study revealed interventions that can be implemented by university managers to enhance the teaching quality. The findings were helpful as they would contribute making operational Continuous Professional Development (CPD) Framework designed to improve instructional quality at every educational level (MoES, 2017) as well as in formulating the teacher policy aimed at professionalizing teaching through the Uganda National Institute for Teacher Education (MoES, 2019).

1.8 Conceptual Framework

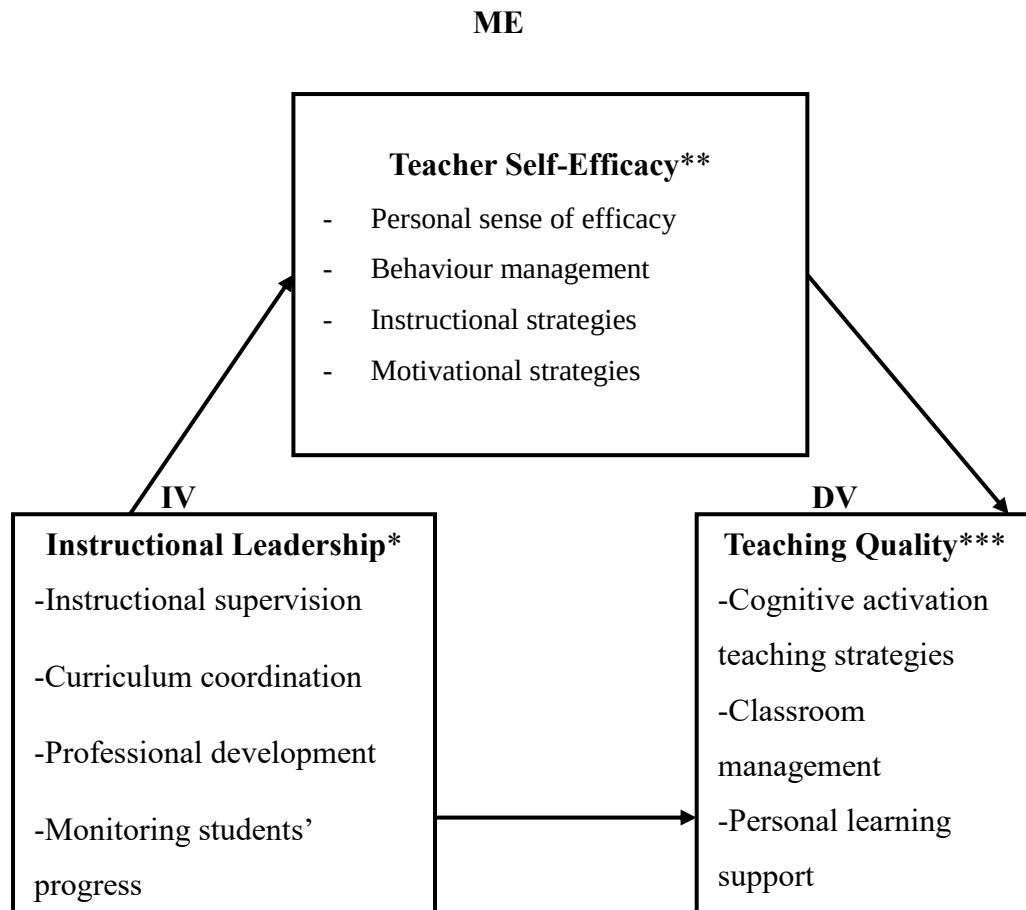


Figure 1.1 A conceptual framework for instructional leadership and teaching quality, with self-efficacy as a mediating factor

Sources: Concepts adapted from: * Lui et al. (2020), Akram et al. (2017), Mourão et al. (2022); ** Nie et al. (2012), *** Jentsch and Schlesinger (2017).

The conceptual framework (Figure 1.1) depicts the relationship between instructional leadership and teaching quality, with self-efficacy serving as a mediating factor. Instructional leadership encompasses several components, including teacher supervision, curriculum coordination, professional development, and monitoring student progress, all of which span areas like classroom management, personalized learning support, and cognitive stimulation. Meanwhile, self-efficacy, the mediating variable, covers aspects of teachers'

confidence, behaviour management strategies, instructional methods, and approaches to student motivation.

1.9 Operational Definitions

Teaching Quality: For the purposes of this investigation, teaching quality is conceptualised as a multidimensional construct consisting of three essential elements: cognitive activation, which fosters critical thinking and intellectual engagement; effective classroom management, which ensures a productive and respectful learning environment; and personalised learning support, which caters to the diverse needs and abilities of students.

Instructional leadership: Instructional leadership in this study denoted professional development, monitoring students' progress, curriculum coordination, and instructional supervision.

Self-efficacy: Self-efficacy is empirically captured through four distinct yet interconnected facets: behaviour management efficacy, which reflects an individual's confidence in regulating student conduct; personal teaching efficacy, which encompasses an individual's overall self-assurance in their teaching abilities; motivational strategy efficacy, which gauges the effectiveness of techniques used to inspire student engagement; and instructional strategy efficacy, which assesses the confidence in designing and delivering instructional content.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter delves into the conceptual foundations and evidence-based research that underpin the investigation, presenting a comprehensive and systematic review of the literature. The narrative is intentionally structured to align with the study's core themes and objectives, fostering a clear and cohesive understanding of the current knowledge landscape. The review summarizes the outcomes of earlier research, emphasising their empirical findings and pointing out the knowledge gaps that this study filled. This literature evaluation served as the basis for the current investigation by evaluating the body of existing knowledge and pinpointing areas that require more research.

2.1 Theoretical Review

This investigation was theoretically anchored in two complementary frameworks: Instructional Leadership Theory (ILT) and Social Cognitive Theory (SCT). The ILT, initially conceptualized by Hallinger and Murphy (1985), drew upon their seminal work on instructional management, as later referenced by Munna (2021). They defined instructional leadership as a strong and relevant leadership that directly focuses on curriculum and teaching practices. They indicated that instructional leaders are persons who promote an institution's effectiveness, particularly regarding teaching and learning. According to the ILT, the instructional leader formulates the school mission and communicates the goals. When administering an instructional program, the instructional leader also coordinates the curriculum, oversees and assesses teaching, and keeps track of students' academic progress.

The head of the school creates a learning environment by making sure that there is enough time for learning, providing incentives for both teaching and learning, encouraging professional growth, and maintaining high visibility (Kurnia et al., 2021). The ILT assumes that when leaders effectively play their role in supporting the institution's staff such as; teachers to learn and develop, the teachers become effective, exhibiting high quality teaching. The weakness of the instructional leadership theory is the expectation that an educational institution leader can play all the roles without support from experts and experience no burnout (Timperley 2005). This can be mitigated by offering instructional leadership as a shared practice, that is, in collaboration with other leaders in an institution. This study drew on Social Cognitive Theory (SCT) to investigate the mediating role of self-efficacy in the relationship between instructional leadership and teaching quality, as the Instructional Leadership Theory does not explicitly account for the impact of self-efficacy on teaching quality.

Although ILT focuses on leaders' responsibilities in promoting professional growth, managing instructional programs, cultivating a supportive learning environment, and defining the school's mission, SCT provides a complementary perspective. According to Bandura (1986), SCT posits that two key factors - self-efficacy and outcome expectations - shape behavioural patterns. Furthermore, self-efficacy is conceptualized as an individual's creative capacity to devise strategies for accomplishing specific tasks, as noted by Lee et al. (2018) and encompasses the ability to critically evaluate one's own performance (Karbasia & Samanib, 2016). A critical dimension of self-regulation, self-efficacy plays a vital role in driving individuals' motivation to initiate or avoid task engagement, as highlighted by Alfaiz et al. (2021).

According to the Social Cognitive Theory, individuals with elevated self-efficacy tend to actively pursue opportunities that align with their goal attainment, as noted by Bajaba et al. (2022). Moreover, self-efficacy exerts a direct influence on behaviour through several mechanisms, including shaping behavioural outcomes, setting realistic yet challenging goals, and identifying potential barriers and facilitators that impact desired behavioural changes (Williams & Rhodes, 2016). Self-efficacy is shaped by a complex interplay of factors, encompassing personal experiences, vicarious learning, persuasive influences, and emotional and physiological states during behavioural transitions, as highlighted by Sheu et al. (2018). Nevertheless, a notable challenge in self-efficacy research is the proliferation of domain-specific assessment tools, resulting in a lack of a universally accepted instrument to measure efficacy beliefs, as noted by Bandura (2006), Nie et al. (2012), and Schwarzer and Jerusalem (1995).

Despite this methodological limitation, self-efficacy remains a valuable construct in educational contexts, offering a clear and relevant framework for enhancing instructional practices, behaviour management, and motivational strategies, as emphasized by Nie et al. (2012) and Bandura and Locke (2003). Building on the principles of Social Cognitive Theory, this investigation examined the interplay between academic staff self-efficacy and teaching quality, with a specific emphasis on the intersections between instructional methodologies, classroom management capabilities, motivational techniques, and personal self-efficacy beliefs.

2.2 Conceptual Review

This conceptual review of dependent variable-teaching quality- is covered in this section. The section defines the concept, identifies its measures and provides

empirical evidence about it from previous scholars. This helped to clarify the concept and how it was rated and provided the gaps that made this study necessary.

2.2.1 Teaching Quality: Teaching quality encompasses the degree to which educational practices successfully cater to students' diverse learning requirements, preferences, and aspirations, while also adhering to predetermined benchmarks and standards, thereby fostering an optimal learning environment (Sogunro, 2017). According to Luoto (2020), the elements of teachers' instructional strategies that support students' learning opportunities and have a favourable correlation with learning outcomes are referred to as teaching quality. According to Nilsen and Gustafsson (2016), teaching quality is reflected in the aspects of teachers' methods that have a good correlation with students' cognitive and affective results. Teaching quality, according to Doğan and Yurtseven (2017), is about using different teaching learning tactics, methods, and/or practices that may improve student accomplishment.

According to Alfonso et al. (2020), teaching quality is characterised by the dynamic interactions between educators and learners within the classroom setting, with a particular focus on instructional approaches that boost academic attainment. Fauth et al. (2019) offer a complementary perspective, positing that teaching quality is contingent upon the pedagogical strategies employed by educators to facilitate student learning. Furthermore, Jentsch and Schlesinger (2017) describe teaching quality as a complex construct comprising three interconnected dimensions: tailored support for individual students, effective classroom organization, and cognitively stimulating instruction. Cognitive activation refers to instructional techniques that promote deeper, content-related

learning by encouraging students to think critically and constructively (Li et al., 2021). Its primary objective is to enhance students' cognitive processes and overall mental functioning.

By working on challenging assignments like triggering students' past knowledge, offering thought-provoking questions, and promoting deliberate discussion, it aims to give students the chance to develop a thorough comprehension of the material (Teig et al., 2019). Exintaris et al. (2023) define cognitive activation as a pedagogical approach that employs specific instructional techniques to stimulate students' engagement in higher-order thinking and problem-solving activities, thereby enhancing learning outcomes. Similarly, Royce et al. (2019) conceptualises cognitive activation as a teaching strategy designed to foster deeper knowledge acquisition and critical thinking skills among students, promoting deep understanding of complex concepts. It entails triggering the mental processes, prior knowledge, and critical thinking abilities required for efficient learning and problem-solving. It includes tasks that involve the learner's cognitive functions, including information synthesis, analysis, and critical thinking (Pacheco & Herrera, 2021).

Li et al. (2021) posit that, cognitive activation occurs when teachers highlight the links between concepts and facts, activate students' prior knowledge, assign tasks and problems that need more cognitive processing, and guarantee high levels of engagement and involvement. Teachers facilitate cognitive activation by challenging students with complex tasks, encouraging cognitive conflicts, and presenting diverse perspectives, interpretations, and solutions. This approach promotes deeper engagement as students articulate, explain, share, and compare their ideas and problem-solving strategies (Nissen, 2023). Cognitive

activation is further enhanced when educators emphasize connections between concepts, encourage reflection on learned material and underlying principles, and integrate new knowledge with prior learning. Cognitive activation is acknowledged as a cornerstone of effective education, as highlighted by von Kotzebue et al. (2020).

This critical process is facilitated when educators establish meaningful connections between disparate concepts, encourage students to engage in reflective thinking about their learning, and scaffold new knowledge onto existing foundations, thereby fostering a deeper and more nuanced understanding. According to Koran and Koran (2018), classroom management involves the strategies and activities teachers use to create an environment that fosters academic engagement, as well as social and emotional learning. Setyaningsih and Suchyadi (2021) define classroom management as the process of establishing and maintaining a structured environment where students can work individually and collaboratively to achieve their goals. In a similar vein, Isuku (2018) stresses that successful classroom management hinges on the strategic utilisation of existing resources to enhance the educational experience and facilitate effective teaching and learning outcomes in school settings.

Thus, classroom management is the process by which the instructor makes sure that lessons go well even when certain students act out. It also involves minimizing student disruptions and includes various strategies and techniques that educators use to sustain students' academic engagement, organization, concentration, attentiveness, and discipline within the classroom. Classroom management is a crucial teaching ability that enables teachers to reduce problematic behaviours in their students and establish learning settings that foster

their intellectual and emotional growth, according to Koran and Koran (2018). In light of this, effective classroom management helps students develop self-control, which frees up instructors' time to focus more on academic education and less on dealing with misbehaviour.

In the end, this results in more successful instruction and improved student academic development. Setting rules and routines, encouraging student interest, recognizing appropriate behaviour, creating a welcoming and cooperative environment, arranging seats appropriately, using interactive teaching methods, and encouraging a sense of teamwork are the seven main strategies for effective classroom management, according to Ahmad et al. (2022). According to Jobirovna (2023), the classroom is a dynamic setting where ideas are fostered, minds are shaped, and the groundwork for lifelong learning is established. It is not just a physical location where lessons are presented. A well-managed classroom is essential to high-quality teaching. It is, vital to establishing a setting that supports learning and development. Positive behavioural changes and quantitative gains are the outcomes of effective classroom management. According to Gage (2018), the likelihood of success for pupils is directly impacted by the classroom management strategies used by teachers. Students in classrooms where effective management strategies are lacking tend to show significantly less interest in their learning.

Effective classroom management is therefore essential to establishing a setting that supports learning and development. Positive behavioural changes and quantitative gains are the outcomes of effective classroom management. According to Gage (2018), the likelihood of success for pupils is directly impacted by the classroom management strategies used by teachers. Students in

classrooms with low rates of classroom management procedures are therefore much less interested in what they are learning. Students' individual learning support, is the teacher's concern, assistance, criticism, and counsel. Vidić et al. (2023), state that supportive teachers have a deep understanding of their pupils, offer them individualized leadership, assist them grasp the material, are academically supportive, and have high standards for behaviour and performance. Students' opinions of teachers' attitudes and actions toward their education and daily life are known as student support (An et al., 2022).

Student personal learning support refers to the social resources within the teacher-student relationship that help students navigate challenging academic tasks or overcome school-related difficulties (Ulmanen et al., 2023). Supporting students' individual learning involves providing structure, involvement, and autonomy. Giving learners choice, significance, or respect is known as autonomy support. While involvement includes warmth, sympathy, and understanding, structure suggests defined expectations (Vidić et al., 2023). Scholars distinguish between two types of student help: instrumental support and emotional support. While perceived instrumental support refers to students' opinions of obtaining academic assistance and support from their professors, emotional support refers to students' views of their teachers as kind, approachable, sympathetic, and reliable (Morin, 2020). Improving students' academic success involves offering personalised support through tailored achievement opportunities, adaptable learning conditions, mutual respect among peers, a nurturing atmosphere, and fostering a strong sense of community and inclusion (Alice, 2023)

Teachers' support plays a vital role in helping students manage their academic responsibilities, including studies, homework, and classwork. Guidance

from mentors, supervisors, and professors is essential, as it reassures students that their educators are genuinely invested in their success and well-being (Ahmed et al., 2018). Providing assistance to students strengthens the teacher-student relationship. When educators show care and concern for their students, it fosters a sense of support, leading students to reciprocate with respect and adherence to classroom rules (Lei et al., 2018). The level of support students receive has a profound impact on their overall adjustment to school, influencing their cognitive, emotional, and behavioural development over both the immediate and extended periods. As noted by Ulmanen et al. (2023), strong teacher support enhances student engagement, improves academic performance, boosts attendance, and reduces the likelihood of disruptive behaviour, suspension, and dropout.

Students' personal learning assistance is positively connected with their level of engagement, school satisfaction, and sense of belonging. Students are supported when teachers give them opportunities in the classroom that foster their general growth and give them a positive experience with the learning process. When they have such experiences and get good feedback from their teachers, students are more inclined to put in more effort in the classroom. Students who receive support from their professors are less prone to act out, according to Vidić et al. (2023). When students feel that their lecturers are there to support them by giving them love and care, they behave well in class and achieve well academically. Students who feel supported by their educators tend to be more confident, engaged, and motivated to learn. When students sense emotional support from their teachers, they are more likely to be driven to master content, enjoy learning, and perform well academically. They are also more likely to exhibit positive behaviours in the classroom.

Xu et al. (2023) found that students who feel encouraged by their teachers display better adaptive behaviours in the classroom compared to those who do not. Notably, the calibre of instructional delivery plays a pivotal role in cultivating student enthusiasm and participation in the educational experience, underscoring its significance as a critical driver of academic engagement. When teachers use effective teaching methods, students are motivated to attend all classes, as they believe they will miss out on valuable learning (Sogunro, 2017). Furthermore, research by Larmuseau et al. (2019) reveals that students' subjective evaluation of instructional quality exerted a profound influence on their receptivity to the educational setting, highlighting the critical impact of perceived instructional excellence on the learning experience. Students are more likely to focus on studying and provide their best effort if they enjoy the instruction and feel that the learning environment is favourable and respected.

Similarly, Bellens et al. (2019), teaching quality serves as the foundation for educational outcomes and motivates educators who want to see their students perform at a very high level. According to Deunk et al. (2018), excellent and differentiated instruction enables students to reach their maximum potential at their own speed, gain a thorough understanding of the material, practice skills, master what they have learned, and eventually accomplish their personal objectives. Bastian et al. (2021), contend that students who attend schools with excellent instruction gain practical experience that helps them master the necessary abilities and cultivate the attitudes they need to become teachers when they are qualified. Students who receive excellent instruction feel more at ease when they enter the workforce, claim Matsko et al. (2018). Students' achievement is impacted by a number of teacher quality factors, according to Kamayubonye and Mutarutinya

(2023), including teamwork, communication skills, monitoring, knowledge, and giving constructive criticism.

Xhaferi (2017) asserts that a key component of student achievement is effective instruction. It has to do with the information, convictions, dispositions, and attitudes that educators bring to their work. Numerous studies have looked at the quality of instruction in higher education. Bell (2022), for instance, looked at the significance of relational pedagogy in raising undergraduate student happiness among staff and students at a UK university. The students were unhappy with the quality of instruction, according to the study. According to the students, lecturers could enhance the quality of their instruction by making sure that there are more student-friendly activities and smaller group discussions in the classroom, that programs are appropriately coordinated, that students are oriented to the university's procedures, that there is less repetitious material, and that there is less assessment overload. Additionally, lecturers needed to hone their presentation skills, be personable, empathetic, guarantee good staff-student relationships, and be accessible for both academic and pastoral help. This, however, went against the widely accepted notion that teaching quality was excellent at European universities. In light of the inconclusive findings and the comparative analysis with Africa, a comprehensive evaluation of teaching quality within African universities became imperative, with a view to identifying areas for improvement and proposing targeted recommendations for improvement. A study conducted by Dali et al. (2017) in Jitra, Kedah, Malaysia, which assessed the teaching and learning standards in secondary schools, yielded a positive outcome, revealing that the instructional quality exhibited was of a superior calibre. However, secondary schools, whose dynamics differ from those of universities, were the

study's context. In the context of universities, it necessitated this investigation. Dei et al.'s (2019) comprehensive review shed light on the complexities facing African higher education in the 21st century, revealing a stark disconnect between the knowledge imparted by institutions and the essential soft skills required for socioeconomic progress. This disparity underscored the prevailing low quality of university education across the continent

Echoing these findings, Fomunyan's (2018) qualitative investigation, spanning six South African universities, uncovered significant shortcomings in teaching and learning quality. The study attributed these deficiencies to a multitude of challenges, including lecturers' inadequate foundational skills and insufficient resources to facilitate effective educational delivery. Notably, despite the Council on Higher Education's established quality standards, the implementation of these benchmarks in practice remained woefully inadequate. Noben et al. (2022) explored the extent to which lecturers demonstrated effective teaching in their research carried out in the Netherlands. According to the study, the majority of lecturers were very good at creating an engaging learning environment. Most of the lectures were well organized, concise, and gave well-structured instructions. In general, the lecturers' quality of instruction was excellent. The results, however, were not unexpected given the study's setting a highly developed nation which is why this research was necessary in a developing nation.

Furthermore, Zhuo and Dong (2018) evaluated students' satisfaction with the level of instruction provided by foreign lecturers who taught art in a study involving students from a Chinese institution. According to the study, most foreign lecturers' teaching was mediocre, and many of them had below-average

student satisfaction ratings. This indicates that the pretend lecturers' instruction was of poor quality. Although the teaching material for external lecturers was rich in content and tightly tied to professional training objectives, they did not entirely follow these guidelines. Although external speakers' lessons were rich in content and tightly tied to professional training goals, they did not entirely follow these guidelines.

2.3 Related Literature Review

This section delves into seminal research exploring the intricate relationships between teaching quality, teacher self-efficacy, and instructional leadership. The existing literature underscores the pivotal role of self-efficacy as a mediating factor in the dynamic interplay between teaching quality and instructional leadership. A comprehensive review of theoretical, conceptual, and empirical studies reveals notable gaps, which this research aims to address, highlighting the necessity of this investigation.

2.3.1 Instructional Leadership and Teaching Quality: Instructional leadership encompasses the strategic and pedagogical responsibilities assumed by educational administrators, who play a vital role in overseeing and guiding teaching and learning practices within an educational institution's settings (Xhomara, 2021). Instructional leadership refers to methods for organizing, assessing, and coordinating instruction that are marked by a collaborative approach to raising teaching standards (Mora-Ruano et al., 2021). Determining the objective of an educational institution, overseeing the curriculum, and fostering a supportive school environment are all aspects of instructional leadership (Sanchez & Watson, 2021). In educational institutions, instructional leaders simultaneously carry out a variety of tasks, such as managing staff,

developing curricula, and teaching. Instructional directors oversee curriculum, monitor and assess instruction, assign resources effectively, and communicate goals to instructors in order to guarantee a seamless teaching-learning process.

Effective instructional leaders are responsible for addressing curriculum and instructional challenges in schools that directly affect teaching quality. The success of educational institutions is primarily influenced by their instructional leaders. At the forefront of instructional leadership lies the critical responsibility of empowering teachers through motivational support, enabling them to discharge their duties with optimal efficiency and effectiveness (Naz & Rashid, 2021). Additionally, instructional leaders play a multifaceted role in overseeing educational programs, encompassing key tasks such as tracking student progress, curriculum development, and the evaluation and refinement of instructional strategies to ensure exemplary educational outcomes. Through curriculum coordination, student progress tracking, and the supervision and promotion of effective teaching techniques that align with students' interests, needs, and expectations, instructional leaders are in charge of enhancing teaching and learning.

Additionally, it entails overseeing instruction, collaborating with educators on the curriculum and lesson plan, resolving issues in the classroom as a group, giving educators the resources, they need, and establishing chances for professional growth (Bellibaş et al., 2022). Creating a supportive work environment, managing the educational production function, encouraging an academic learning atmosphere, and formulating a mission and goals are all examples of instructional leadership tasks. With a primary focus on enhancing student learning outcomes, instructional leaders combine charisma and expertise

to lead (Xhomara, 2021). Enhancing teaching and learning through curriculum development, teacher assistance, and instructional practices is the main goal of instructional leadership. Accordingly, this type of approach is successful in fostering teacher efficacy, professional growth, and student learning outcomes (Kilag & Sasan, 2023). With a strong goal orientation, instructional leaders typically work to enhance educational institutions, but they also create academic pressure by suggesting high expectations for the teachers.

An instructional leader plays a pivotal role in shaping the institution's vision by establishing clear objectives, designing a tailored curriculum, and cultivating a supportive learning environment that fosters academic excellence (Emmanouil et al., 2014). The leadership's actions and decisions are instrumental in establishing and sustaining trust within the educational ecosystem. As emphasized by Ma and Marion (2021), the leader's values, attitudes, and behaviours significantly influence the trustworthiness of the work environment. Moreover, when administrators empower teachers with opportunities to explore innovative pedagogies and access cutting-edge resources, they are more likely to refine and adapt their teaching practices (Bellibaş et al., 2022). Instructional leadership encompasses a multifaceted set of responsibilities, including curriculum management, professional growth initiatives, student progress monitoring, and instructional supervision, as noted by McBrayer et al. (2019) and Mourão et al. (2022).

Several research studies have explored the interplay between instructional leadership and teaching quality, with notable contributions from scholars such as Ahmad and Hamid (2021), Bafadal et al. (2018), Bellibaş et al. (2020), Ismail et al. (2018), Liu and Hallinger (2018), Malunda et al. (2017), Nyangarika and

Ngasa (2020), Saeed and Ali (2019), and Sanchez and Watson (2021). In a study conducted in East Java, Indonesia, Bafadal et al. (2018) probed the impact of instructional leadership on the performance quality of primary school educators. The findings yielded a significant positive correlation, underscoring the profound influence of instructional leadership on teaching quality. Similarly, Ahmad and amid (2021) explored how the instructional leadership strategies employed by head teachers affected the effectiveness of primary school teachers in Karachi's Korangi District.

The findings showed that instructors' effectiveness was increased and improved by instructional leadership approaches. This indicates that teaching quality was impacted by instructional leadership. Nevertheless, the relevance of this study to the Ugandan university context is limited, as it focused exclusively on primary school teachers and was conducted in a different geographical setting. In contrast, Bellibaş et al.'s (2020) investigation adopted a distinct approach, analysing teachers as the primary units of analysis to explore the interplay between distributed leadership, instructional leadership, and instructional quality across a diverse range of 32 OECD countries. Teaching quality was positively and strongly correlated with instructional leadership, according to the model's direct impact results. However, because their research was conducted in nations with highly developed educational systems, the findings might not apply to less developed nations like Uganda, which is why this study is necessary.

Bellibaş et al. (2022) used teachers from primary and secondary schools in different Turkish provinces to investigate how instructional leadership affected the shift in teachers' classroom practices. The findings showed that instructors' classroom practices changed in a favourable and significant way as a result of

instructional leadership. However, because primary and secondary teachers from outside of Uganda participated in the study, demographic and contextual gaps were discovered. This necessitated the current investigation, which involved university instructors in Uganda. Ikegbusi et al. (2016) conducted a comparative analysis to investigate the influence of instructional supervision on the efficacy of secondary school educators in Enugu State, Nigeria, shedding light on the relationship between supervisory practices and teacher effectiveness. The findings of the t-test showed that both external and internal instructional supervision improved secondary school teachers' instructional efficacy. However, because the study was conducted outside of Uganda and in secondary schools, whose dynamics differ from those of universities, contextual and population gaps arise, necessitating the investigation.

Ismail et al. (2018) probed the interconnection between teachers' 21st-century functional competencies and instructional leadership, focusing on primary and secondary school educators in Malaysia. Their research revealed a strong, positive correlation between instructional leadership and teacher performance, particularly in areas such as goal-setting, communicating school objectives, and facilitating professional growth opportunities. Consequently, the instructional leadership exhibited by school administrators was found to profoundly impact teachers' effectiveness, which, in turn, influences instructional quality. However, the study's focus on non-university educators limited its applicability to a university setting. Meanwhile, Liu and Hallinger (2018) explored the influence of principals' instructional leadership on teachers' professional development within the context of Middle Eastern education.

According to the study, teacher performance was moderately impacted both directly and indirectly by the instructional leadership techniques of principals.

Nevertheless, the survey revealed a knowledge gap in addition to the school's non-university status. For example, this suggested that the favourable impact was mild, when all the other researchers said it was highly significant. This implied that every study should be evaluated according to its own merits. Malunda (2017) conducted a cross-sectional study to investigate how pedagogical practices in Northern, Eastern, Central, and Western Uganda were affected by instructional supervision by public secondary school directors. According to the study's findings, Ugandan public secondary school teachers' pedagogical methods were statistically significantly impacted by instructional supervision. However, because this study was conducted in secondary schools, it was necessary to do additional research in a university setting. Moreover, the study's scope was limited to investigating merely two dimensions of teaching quality, namely cognitive activation and personal learning support, leaving the other potentially significant aspect unexplored.

Thus, it was imperative that a study covering all three fundamental aspects of teaching quality be conducted in public universities in Uganda. Nyangarika and Ngasa (2020) used secondary teachers in Arusha, Tanzania, to examine how different leadership philosophies such as transformational, transactional, and instructional—affect classroom instruction. According to their regression analysis, classroom instruction was positively and significantly impacted by instructional leadership. Teachers in secondary schools, whose educational needs differ from those of university academic staff, participated in this study. Therefore, this study considered the factors within a university context.

Saeed and Ali (2019) explored the relationship between classroom management (CM) and authentic leadership (AL) among university lecturers in Pakistan through a mixed-methods approach. Their findings, derived from thematic analysis and Pearson's rank correlation, showed a weak correlation between AL and CM in public institutions, but a strong correlation in private universities. However, since the study only conducted correlation analysis at an early stage, it left empirical gaps. A more in-depth confirmatory analysis was necessary to accurately gauge the influence of instructional leadership on teaching quality, thereby providing a more comprehensive understanding of their interrelationship.

In a similar vein, Sanchez and Watson (2021) conducted an in-depth qualitative study involving elementary school principals in central California, USA, to explore the nexus between principals' instructional approaches and school performance. Their findings revealed that instructional leadership plays a pivotal role in shaping teachers' professional growth, particularly in enhancing instructional practices. Nonetheless, the study's setting was American elementary classrooms. The dynamics were undoubtedly different from those of universities, which is why this study was necessary in a university setting. It is worth noting that, for the purposes of this study, instructional leadership was operationally defined as encompassing four key domains: curriculum coordination, educators' professional growth initiatives, instructional oversight, and student progress tracking (McBrayer et al., 2019; Mourão et al., 2022). The subsequent sections will delve into the interconnections between each of these components and instructional quality, providing a nuanced understanding of their relationships.

2.3.1.1 Instructional supervision and Teaching Quality: The practice of supporting teachers through direction, guidance, stimulation, or other

development activities in aimed at enhancing the instructional environment is known as instructional supervision (Maisyaroh et al., 2021). Instructional supervision describes implementation of strategies, activities, and approaches employed by supervisors or instructional leaders to support and improve teaching and learning within educational settings to enhance instructional quality, promote professional growth among teachers, and ultimately improve student learning outcomes (Sumapal & Haramain, 2023). According to Ashun and Acquah (2021), instructional supervision is a strategic leadership practice wherein educational institution administrators systematically oversee, assess, and evaluate instructors, providing guidance and direction to ensure that educational institutions achieve their objectives and realize their vision. An activity chosen by the school to influence teacher behaviour in order to promote learning and accomplish the institution's objectives is called instructional supervision.

Karim et al. (2021) define instructional leadership as the assistance provided by supervisors to help teachers achieve educational goals. This support includes guidance, motivation, and teachers' prospects for enhancing knowledge, skills and abilities. Examples of such support include helping with the implementation of educational innovations, selecting learning resources, and improving teaching and assessment methods. According to Mayudho et al. (2021), instructional supervision aims at assisting teachers in conducting high-quality learning activities that foster student growth and enable them to reach their full potential. In order to develop and enhance professional competence or performance, improve instruction, supervision serves as a guide. The paramount objective of instructional supervision is to augment and refine the teaching-learning paradigm, thereby playing a pivotal role in elevating and refining

teachers' pedagogical expertise and instructional efficacy. Supervisors are responsible for guiding teachers, managing the school's activities, fostering creative learning, carrying out continuous assessments, and enriching the teaching experience.

The purpose of supervising instruction is to improve and develop the learning process, while also providing solutions to address various challenges that may emerge during its execution, whether they are related to the infrastructure and facilities, the conditions under which students learn, or the difficulties teachers encounter when instructing. Maisyaroh et al. (2021) explain that instructional supervision can either be group supervision or individual supervision. Many teachers participate in group supervision through seminars, trainings, teacher meetings, upgrading programs, and other means. Individual supervision, on the other hand, helps teachers grow as individuals. Direct or indirect supervision of instruction is another option. The method of supervision known as "direct instructional supervision" entails supervisors speaking with teachers directly during meetings, workshops, and trainings. Using communication tools like a supervisory bulletin, the indirect strategy involves supervision actions.

Classroom observations, coaching and feedback, curriculum alignment, professional development, data analysis, teamwork and assistance, reflective practice, and professional goal-setting are a few examples of common instructional supervision techniques, according to Sumapal and Haramain (2023). Instructional supervision is a means of enhancing teachers' performance in their professional roles, as being a true professional requires instructors have the ability to make sound decisions and provide high-quality services. The professional

growth of teachers is closely linked to instructional supervision. Effective instructional supervision fosters a vision for implementing change within educational institutions, making improvements more achievable (Ashun & Acquah, 2021). According to Sumapal and Haramain (2023), popular instructional supervision strategies include classroom observations, coaching and feedback, curriculum alignment, professional development, data analysis, teamwork and assistance, reflective practice, and professional goal-setting.

Instructional supervision serves as a vital catalyst in enhancing teachers' proficiency and efficacy in fulfilling their professional obligations. To excel in their role, educators must demonstrate the capacity for informed decision-making and delivery of exemplary instruction. A symbiotic relationship exists between instructional supervision and the ongoing professional development of educators, fostering a culture of continuous growth and improvement. Effective instructional supervision facilitates progress by fostering a vision to implement change in the educational institution (Ashun & Acquah, 2021). Thus, one of the most important tools for educational institutions is instructional supervision. By monitoring, empowering, and training teachers to provide their students with worthwhile experiences, it assists educational institutions in ensuring that their vision and goal are realised. Through feedback, instructional supervision helps teachers identify and address issues in their instruction, enhance their methods and abilities, and keep a positive outlook.

Through professional growth, instructional supervision supports instructors' self-reflection and institutional progress. Instructional monitoring enhances teachers' professional expertise and increases the efficacy of their instructional practices (Basilio & Bueno, 2021). Instructional supervision

supports teachers in enhancing the quality of classroom instruction by guiding them in selecting appropriate learning models, strategies, and materials (Maulana & Prestiadi, 2021). Numerous researchers have found a connection between teaching quality and instructional supervision. Ampofo et al. (2019) employed a mixed-methods approach to investigate the impact of direct supervision by school administrators on teacher performance in Ghanaian public senior high schools. The study engaged a diverse range of stakeholders, including teachers, class prefects, department heads, school administrators, and the Regional Director of the Inspectorate Division of the Ghana Education Service.

The findings revealed that school administrators' oversight of classroom organization and instructional delivery significantly influenced teacher performance. However, the focus on high school instructors highlighted the need for a similar investigation within the university context. In a separate study, Ashun and Acquah (2021) examined the state of instructional supervision for social studies teachers in Ghana's Western North Region, specifically within the Aowin Municipality. The research indicated that instructional monitoring provided teachers with the necessary professional support, enhancing the quality of their teaching. However, the study focused on junior high school teachers, whose teaching dynamics differ from those at the university level. This finding underscored the necessity for extending the investigation to the higher education sphere.

In a related study, Karim et al. (2021) focused on Indonesian educators to elucidate the interplay between principal supervision, teacher professional competence, and teacher performance. Notably, the study revealed that instructional supervision had a negligible and negative impact on teachers'

performance, yielding unexpected insights into the dynamics of educational leadership and teacher efficacy. The results of this study, however, ran counter to those of other researchers, all of whom indicated a favourable and noteworthy influence. This implied a gap in knowledge, suggesting that every study should be evaluated independently. Maisyaroh and colleagues (2021) carried out a study involving teachers from the Philippines and Indonesia to examine the implementation of instructional monitoring for primary school educators in both nations. The study's results showed that while the frequency of instructional supervision strategies differed between Indonesia and the Philippines, their effectiveness was remarkably similar. In Indonesia, common supervision methods included regular teacher meetings, training sessions, peer discussions, seminars, and professional development programs.

In contrast, the Philippines employed a distinct approach, incorporating seminars, lesson studies, self-evaluation, peer discussions, and teacher meetings. Notably, the findings emphasized the profound impact of instructional supervision on teacher learning models and resources, suggesting its pivotal role in shaping educational quality. However, given the focus on elementary school teachers, whose instructional needs diverge from those of university faculty, it became imperative to replicate this study within a university setting. In a separate review, Omaali et al. (2021) examined the influence of instructional monitoring practices on effective teaching in Ugandan secondary schools. Their review revealed that such supervision substantially enhanced teachers' professional skills, ultimately leading to more effective instruction and improved student outcomes. Consequently, the quality of teaching in these secondary schools was elevated due to enhanced instructional oversight.

However, because it was a review, this study raised methodological issues. As a result, this empirical investigation was drawn to the university setting. Teachers in the first congressional district in Bohol, Philippines, were used by Nalzar (2022) in a study examining the connections between instructional monitoring and instructors' competency. The results demonstrated that the ability of teachers and the supervision of school administrators did not significantly correlate. This indicates that the quality of training was unaffected by instructional supervision. There was a knowledge vacuum, though, because this went against another earlier research. This implied that one study's conclusions could not be applied to other situations. This highlights the importance of conducting this study within Ugandan universities.

Renata et al. (2018) conducted an investigation into the influence of principal supervision on the instructional efficacy of secondary school educators, shedding light on the critical role of leadership in shaping teacher performance. Their findings revealed that effective teachers were significantly influenced by supervision, suggesting that the quality of teaching is strongly affected by supervisory practices. However, the study was conducted in universities, as it focused on secondary school teachers. In a related study, Setia and Nasrudin (2020) employed a qualitative approach to examine the outcomes and challenges associated with implementing a teacher monitoring program. The study, which involved teachers from schools in Indonesia's Sumedang Regency, yielded findings that underscored the positive impact of instructional supervision on teaching quality. However, the study's qualitative design limited the generalizability of the results, highlighting the need for a quantitative investigation to validate and broaden the findings.

Meanwhile, Zikanga et al. (2021) probed the relationship between head teachers' supervisory practices and teacher job performance in a study involving secondary school educators at government-aided schools in Western Uganda. Their results showed that, while supervisory behaviours and support exerted a positive and significant influence on teacher performance, communication within the supervisory process had no discernible impact. This suggests that not all elements of instructional supervision have a meaningful impact on teachers' job performance which obliquely pointed to teaching quality. This raised a knowledge gap that led to testing whether in a combined test, instructional leadership influences teaching quality.

2.3.1.2 Curriculum coordination and Teaching Quality: According to Evenglosky et al. (2018), curriculum management describes how educators employ the resources defined in a curriculum to carry out instruction and assessment. Using pertinent and suitable instructional resources, instructional leaders are responsible for coordinating and guaranteeing the delivery and evaluation of the curriculum for various courses. Palestina et al. (2020) conceptualize curriculum coordination as a purposeful and systematic process of translating curriculum designs into actionable instructional strategies within the classroom environment, thereby integrating curriculum theory and practice. The fulfilment of officially prepared course material and procedures, as well as the use of concepts and innovations to teach knowledge, skills, concepts, and interpretations, as well as everyday classroom activities involving teachers and students, constitute curriculum coordination. According to Karakus (2021), the primary aim of curriculum coordination is to empower students with the requisite knowledge, skills, and competencies to capitalize on emerging opportunities, foster personal growth, and

cultivate a deeper understanding of the world around them. Lesson plans, instructional recommendations, scripts, and assessment options pertaining to a set of objectives are typically included in curriculum designs. According to Evenglosky et al. (2018), these designs emphasize consistency to assist teachers in effectively implementing and upholding the curriculum structure in order to achieve a variety of goals. Curriculum coordination should guarantee that people carrying out a teaching program adhere to the curriculum. This indicates that the teachers adhere to the objectives and methods of instruction established by the curriculum designers.

While preserving the programme developers' design, curriculum coordination should guarantee that a programme for education is taught as projected. The original plan, which is identical to the stated and implemented programmes, should be strictly followed while implementing the curriculum. Ochwo et al. (2023) posit that optimal curriculum coordination is achieved when students acquire a comprehensive range of experiences, knowledge, skills, concepts, and attitudes that collectively enable them to navigate societal expectations and contribute meaningfully. In a related investigation, Cheserek et al. (2021) examined the impact of school leadership on curriculum coordination within public secondary schools in Kenya's Elgeyo-Marakwet County, soliciting insights from secondary school teachers to inform their study.

The study's outcomes revealed a significant correlation between leaders' enthusiasm for educational reform and the efficacy of curriculum coordination, implying that visionary leadership is a critical determinant of curriculum quality. Nevertheless, the study's focus on secondary schools underscores the need for analogous research within higher education institutions. In a separate

investigation, Dube and Jita (2018) probed the obstacles hindering the implementation of a revised curriculum in rural Zimbabwean schools, gathering insights through a survey of teachers. According to the study, curricular coordination was facilitated by positive school ties that were formed by school administrators. This implies that curriculum coordination or teaching quality is improved when school administrators foster positive relationships among teachers.

However, it became necessary to do this present investigation because it was conducted outside of the university. Chan et al. (2017) examined the issues influencing high-quality instruction in their review. According to the evaluation, teaching quality was impacted by a lack of curriculum and institutional support. This suggested that effective curriculum coordination depends on leadership support to guarantee high-quality instruction. In a similar vein, Bahtilla and Hui (2020) reviewed the function of principals as curriculum and instructional leaders and offered recommendations for tactics that would work in Cameroonian schools. According to the study, among other things, the school principal's effectiveness was crucial to the curriculum's successful implementation. This implied that effective curriculum coordination or high-quality instruction depend heavily on an institution's leadership. But because the aforementioned articles were reviews, they brought up a methodological issue that made this empirical investigation necessary.

Combs et al. (2022) conducted an investigation to elucidate the relationship between implementation fidelity and various classroom characteristics, aiming to inform the strategic allocation of resources to support teachers in a multi-state sample of U.S. schools. According to the study,

curriculum integrity or teaching quality was improved by assisting classroom management techniques for the application of highly interactive evidence-based interventions. However, the study's context in the United States, a nation with a high level of development, underscores the importance of replicating this investigation in diverse settings, such as Uganda. Furthermore, Gelmez-Burakgazi (2020) explored the factors shaping curricular fidelity in a Turkish case study, focusing on primary school teachers to illuminate the complexities of implementation in a distinct cultural and educational landscape.

The study revealed that low leadership in terms of limited school facilities and limited facilitation of learning hindered effective curriculum fidelity hence, low quality teaching. This meant that provision of sufficient resources and high facilitation led to teaching quality. However, the study context was Turkey and in elementary schools. This necessitated conducting a study at Ugandan universities. Haquea and David (2022) conducted a qualitative study with instructors and head teachers of private schools in Dubai in an effort to pinpoint the obstacles and offer solutions for efficient curriculum coordination. According to the study, teaching quality resulted from efficient curriculum coordination, which included giving teachers relevant training and involving students in their education.

Juharyanto et al. (2018) evaluated the part that school administrators play in successfully executing the curriculum in Indonesian religious schools. Effective leadership behaviours, such as change leadership, spirituality, instruction, and entrepreneurship, improved curriculum coordination, that in turn improved the instructional quality, according to the study. However, it was essential to conduct this study, as the research by Juharyanto et al. (2018) took place outside of a university setting. Lytal (2023) engaged science teachers from

9th to 12th grade classrooms to explore the experiences of high school educators in Mississippi as they implemented the standards. According to the study, strong educational standards of teaching quality are the result of instructional leadership in curriculum coordination, which includes giving teachers the necessary tools, support, training, and time for reflection. Okoth (2018) assessed how transformational leadership approaches affected curriculum coordination in secondary schools in Kenya.

Secondary schools served as the study's sites. School leaders who worked to ensure the group's goal of realizing a vision, acted as positive role models, made decisions constantly, inspired students to work hard, and organized meetings with other schools to accomplish subject objectives were found to improve curriculum coordination. Their leadership in putting the curriculum into practice helped to improve the quality of instruction. However, this study was conducted outside of universities as well, which made it necessary for this study to be conducted within universities. Ochwo et al. (2023) conducted an in-depth examination of the institutional dynamics influencing curriculum integrity within vocational training centres in Kampala, Uganda. Their study focused on the interplay between curricular fidelity and two pivotal factors: teachers' leadership efficacy and institutional backing. The results revealed a statistically significant and positive correlation between leadership effectiveness in curriculum management and implementation, and the resultant curriculum fidelity, ultimately enhancing teaching quality. This suggests that instructional leadership in curriculum coordinating directly affects the quality of instruction. Nonetheless, tutors from vocational schools were included in this study; their learning settings

were different from those of university professors. This led to the decision to carry out this study at Ugandan academic institutions.

Nevenglosky et al. (2018) undertook a qualitative case study at a private educational institution situated in the southwestern region of south-eastern Texas, USA. This research endeavour focused on identifying the obstacles hindering efficacious curriculum coordination, with teachers serving as key participants in the study. The study indicated that effective curriculum coordination involving provision of professional development to teachers, peer-collaboration, and access to curriculum resources led to teaching quality in relation to curriculum fidelity. In their study, Süer and Kinay (2022) examined curriculum fidelity behaviours of primary teachers of curriculum of different disciplines in Diyarbakır Province in south eastern Turkey. The findings showed that the teachers' strong adherence to the curriculum, which emphasises the programmes' role in directing learning activities and clarifying the objectives of school subjects, led to high-quality instruction. This suggested that effective teaching quality is achieved by enabling educators to implement the curriculum efficiently.

2.3.1.3 Professional Development and Teaching Quality: According to professional skills and standards, teachers' professional development is a systematic, initial, and ongoing process (Zaidi et al., 2018). Alshehry (2018) posits that the fundamental objective of sustained professional development for educators is to cultivate a more conducive and inclusive educational ecosystem. This perpetual pursuit of excellence is termed professional growth, which involves the systematic enhancement of teachers' expertise and competencies (Su & Wang, 2022). By leveraging formal education, specialized training, and targeted professional development initiatives, educators can hone their

pedagogical skills, expand their knowledge base, and remain abreast of best practices. As Meyer et al. (2023) note, professional development programs yield the most substantial benefits when they prompt educators to critically reassess their established approaches and integrate innovative, evidence-based strategies into their instructional repertoire.

Programmes for teacher professional development are one way that educators can enhance their abilities to provide education more effectively (Ogolo & Onukwu, 2019). Changing classroom practices, enhancing schools, and improving students' learning results all depend on teachers' professional development. Professional learning can occur in various formal contexts, including structured professional development programs, collaborative teaching research groups, and sanctioned mentoring initiatives. Moreover, informal interactions, such as peer-to-peer teaching, collective planning, and colleague mentoring, can also foster teacher growth (Postholm, 2018). Effective professional development programs aim to transform educators' mindsets and beliefs, with the underlying assumption that these shifts will, in turn, drive meaningful changes in classroom practices and behaviours, ultimately leading to enhanced student learning outcomes. Professional growth yields multifaceted benefits, extending to individuals, organizations, educational networks, and systems at large (Nguyen, 2019).

Creemers et al. (2013) emphasize the pivotal role of professional development in augmenting teachers' subject-matter expertise and pedagogical acumen, thereby empowering them to meet exacting standards and deliver high-quality instruction. The primary focus of teacher professional development is twofold: enhancing educators' disciplinary knowledge and cultivating their

instructional efficacy within complex educational ecosystems. As Zaidi et al. (2018) note, the ultimate objective of professional development is to inspire and support teachers in refining their pedagogical skills, facilitating effective subject-specific instruction, and ultimately driving significant, positive impacts on student learning outcomes. The relevance of excellent teacher professional development to the tactic's instructors reported applying to enhance students' learning in the classroom was investigated by Barrera-Pedemonte (2016) in a study that reported teaching practices across nations and economies.

In a study that reported on teaching techniques across nations and economies, Barrera-Pedemonte (2016) looked at how well-quality professional development for teachers affected the methods they reported were employing in assisting students to learn. Lee and Lee (2018) looked at organisational and individual factors that affected the connection between improving work performance and career advancement. Employees of Korean companies were used in the study. According to the study, professional development has an impact on improving job performance, that subsequently, affects the quality of instruction in educational institutions. Nonetheless, the study was conducted in Korea, a country with distinct work dynamics from Uganda.

This study, which was conducted in Uganda, was drawn to this contextual gap. In a study involving teachers from government schools in New South Wales, Australia, Gore et al. (2017) explored how collaborative professional development impacts teaching quality. Professional growth improved the quality of instruction, according to this qualitative study. However, because the study focused on schools in a wealthy nation, its conclusions might not apply to poor nations like Uganda. The present study was necessitated by the need to investigate

the impact of professional development on teacher efficacy within the context of Ugandan universities. A global study conducted by Liu and Liao (2019) explored the relationship between professional development and teacher efficacy, but notably excluded African countries from their sample. Their findings revealed a statistically significant positive correlation between teacher efficacy and professional development programs, underscoring the importance of high-quality instruction. However, the omission of African countries from their study highlighted the need for a similar investigation within an African context.

In a separate study, Meyer et al. (2023) examined the effectiveness of professional development activities among German teachers, finding that these initiatives led to significant changes in teachers' professional practices due to heightened cognitive activation. Nevertheless, the study's focus on Germany, a highly developed nation, underscored the importance of the necessity to replicate this research in diverse settings, such as Uganda, became apparent. Consequently, conducting this study in a developing nation became a priority. Ogolo and Onukwu (2019) investigated the nexus between teacher quality and participation in professional development programs in Nigerian secondary schools, specifically in Bayelsa State.

Their findings revealed a significant correlation between teacher quality and engagement in professional development initiatives, suggesting a positive relationship between teaching quality and professional growth. However, the study's focus on secondary schools necessitated the present investigation's focus on universities. Furthermore, Otaka et al.'s 2023 study explored the impact of performance management on teacher effectiveness in Ugandan primary schools, revealing that career advancement had a positive and significant influence on

teacher effectiveness, thereby underscoring the critical role of professional development in enhancing teaching quality. Notably, the findings of the study, which involved primary school teachers, may not be generalizable to higher education settings, highlighting the need for similar research within university contexts.

A review of existing literature by Postholm (2018) examined the professional growth of teachers in schools and its impact on school improvement, revealing that enhancing teachers' learning processes is crucial for school advancement. This suggests that high-quality instruction is, in part, a product of professional development. However, given the review's nature, empirical research was necessary to validate or challenge these findings. Sancar et al. (2021) conducted a comprehensive review of existing studies to provide a practical framework for optimal professional development, concluding that effective educators continually refine their instructional quality through thorough, contextual, supportive, and collaborative approaches. Meanwhile, Combs et al. (2022) explored the relationship between implementation fidelity and various classroom characteristics, aiming to optimize resource allocation for teachers across multiple schools in the United States.

Although Lytal's (2023) study explored the experiences of high school educators in Mississippi, its focus on a highly developed country like the United States underscores the importance of conducting similar research in diverse contexts. Moreover, Juharyanto et al.'s (2018) study took place outside a university setting, highlighting the need for research within higher education contexts. Ochwo et al.'s (2023) examination of institutional factors influencing curriculum integrity in Ugandan vocational training centres provides valuable

insights, while Nevenglosky et al.'s (2018) case study in a Texas private school emphasizes the role of curriculum adherence in achieving high-quality instruction. Alshehry (2018) underscores the importance of ongoing professional development in enhancing teaching and learning environments.

Meyer et al. (2023) suggest that effective professional development programs encourage teachers to re-evaluate their practices and adopt new strategies. Formal professional learning settings, such as development programs and mentoring initiatives, can foster teacher growth, while informal interactions like peer teaching and colleague mentoring also play a crucial role (Postholm, 2018). Professional growth has far-reaching benefits, impacting individuals, organizations, and educational systems (Nguyen, 2019). Creemers et al. (2013) highlight the significance of professional development in enhancing teachers' content knowledge and teaching strategies, enabling them to deliver high-quality instruction. Zaidi et al. (2018) emphasize the primary aim of professional development: motivating and supporting teachers in refining their pedagogical skills to positively impact student learning outcomes.

Gore et al.'s (2017) study in Australian government schools demonstrates the positive impact of collaborative professional development on teaching quality. However, the study's focus on wealthy nations underscores the need for similar research in developing countries like Uganda. Liu and Liao's (2019) global study on professional development and teacher efficacy excluded African countries, highlighting the importance of researching this topic within an African context. Meyer et al.'s (2023) investigation of professional development activities in Germany provides valuable insights, while Otaka et al.'s (2023) study on

performance management and teacher effectiveness in Ugandan primary schools underscores the need for similar research in higher education settings.

Postholm's (2018) review of teacher professional development highlights its impact on school improvement, while Su and Wang's (2022) mini-review emphasizes the importance of professional development in enhancing teacher trainers' teaching skills and knowledge. Zaidi et al.'s (2018) study on factors influencing teachers' instructional techniques in Pakistan provides additional insights into the complex relationships between teacher development, instructional quality, and student learning outcomes. The study findings showed a strong correlation between teaching techniques, professional development for instructors, and organizational characteristics. Professional development therefore enhanced teaching methods, which in turn enhanced the quality of instruction. However, because this study's context occurred outside of Uganda, a study that captures the local context must be conducted in Uganda.

2.3.1.4 Monitoring Students' Progress and Teaching Quality: Tracking students' success in their academic endeavours is known as monitoring their progress (Klapproth et al., 2022). According to Fuchs and Fuchs (2001), progress monitoring is the process by which teachers evaluate students' academic achievement to ascertain if they are benefiting appropriately from the standard instructional program and to create more effective programs for those who are not benefiting enough from it. One useful strategy that can give teachers specific feedback on how their pupils are responding to lessons is progress tracking. The practice's basic tenet is to record students' learning progress and utilize the information to guide instructional decisions on interventions over time. Progress monitoring is a formative assessment tool that provides feedback to both teachers

and students by tracking and evaluating learning progress at different points in time (Gebhardt et al., 2023). For students' study habits and academic achievement, it is essential to track their comprehension levels.

Evaluating students' understanding is an essential part of the educational process, allowing teachers to adjust their teaching methods and enhance learning outcomes. Effectively gauging students' comprehension plays a critical role in improving instructional effectiveness, which directly affects academic performance (Van de Pol et al., 2019). Monitoring learners' progress throughout their educational journey is key to achieving successful learning. The monitoring method determines the students' present performance, the degree of accomplishment of the objectives to be met, and the rate at which the students are making progress toward those objectives (Yaziz & Noordin, 2018). Academic progress of a student or group is usually evaluated to determine the effectiveness of the instruction they have received and to identify whether they have achieved their learning goals or need additional support. Frequent delivery of brief performance assessments in a chosen academic subject is necessary to track students' progress.

By monitoring students' progress, teachers can make informed decisions about whether students require support, if instructional methods need revision, or if teaching objectives should be modified (Klapproth et al., 2022). In a review, Fuchs and Fuchs (2011) evaluated how well teachers tracked their students' progress using systematic progress monitoring. According to their analysis, progress tracking made it possible to identify pupils who required more or different types of instruction and to create more effective educational programs that would help kids perform better. Therefore, observing students contributes to

the delivery of high-quality instruction. However, because the analysis was based on a literature review, there was a need for empirical research.

On their part, Nunes et al. (2018) conducted a study involving second-year odontology students at the State University Júlio de Mesquita Filho in Brazil to examine the importance of student monitoring. The study revealed that monitoring and guiding students made learning more natural, having a positive effect on their educational experience by improving access to knowledge and playing a crucial role in organising the material covered. This suggests that student monitoring contributed to the delivery of high-quality instruction. However, since the original study was carried out in Brazil, where university settings differ significantly from those in developing countries such as Uganda, there was a need to conduct a similar investigation within the Ugandan context.

Vaccaro and Sabella (2018) investigated the effect of tracking student progress on learning in a Florida high school. The results indicated that monitoring activities effectively supported student progress and positively influenced their overall learning and development. The findings underscored the value of observing students in fostering high-calibre teaching. Nevertheless, the study's context within the United States, with its distinct educational system, raised questions about the generalizability of these findings to developing countries like Uganda, where educational landscapes differ significantly. This underscored the imperative for context-specific research within Uganda. Moreover, a review of existing literature exposed a notable gap in research exploring the interplay between teaching quality and student progress monitoring, thereby necessitating this study to address this knowledge deficit.

2.3.2 Instructional Leadership and Self-efficacy: Self-efficacy encompasses an individual's conviction in their capacity to execute a task or fulfil a role, navigating associated complexities with confidence. In the realm of education, teacher self-efficacy pertains to the belief that one's instructional methods can cultivate positive learning outcomes and foster student growth (Perera et al., 2019). As Andreou et al. (2022) note, this concept reflects a teacher's assurance in their ability to drive student engagement and learning, achieving desired educational outcomes. Permata et al. (2022) further emphasize the pivotal role of teacher self-efficacy in informing their lesson preparation strategies, enabling them to implement effective approaches that cater to diverse student needs. Ultimately, Culp-Roche et al. (2021) suggest that self-efficacy is a hallmark of exemplary teachers, who demonstrate resilience in overcoming challenges and delivering high-impact instruction that resonates with their students.

Zhang et al. (2019) conceptualize self-efficacy as an individual's subjective assessment of their capacity to successfully navigate daily tasks, which, in turn, informs their decision-making processes. Ma and Marion (2021) delineate teacher efficacy as the confidence educators possess in their ability to design and implement effective instructional strategies, thereby achieving specific learning objectives. Rwothumio et al. (2023) further elucidate teaching efficacy as the teacher's proficiency in employing context-specific pedagogical approaches, maintaining a well-organized learning environment, and fostering student engagement. Notably, instructional leadership has been identified as a crucial factor influencing teacher efficacy. Bandura's (1997) social cognition theory posits that educational leaders' strategic positions can significantly impact teachers' sense of efficacy, suggesting a complex interplay between leadership, teacher

confidence, and instructional effectiveness. Educational institution leaders play a pivotal role in fostering teachers' motivation and self-efficacy by engaging in instructional leadership activities and creating an environment conducive to effective teaching (Ma & Marion, 2021). When teachers perceive instructional leadership as robust, they are more likely to support school development goals and exhibit higher self-efficacy (Xie et al., 2022). Effective instructional leadership involves setting clear educational objectives, designing curricula, evaluating teaching practices, and cultivating a supportive school environment that enhances teacher self-efficacy (Kunwor, 2023). A plethora of studies has investigated the relationship between instructional leadership and teacher self-efficacy, yielding valuable insights (e.g., Alanoglu, 2022; Calik et al., 2012; Cansoy & Parlar, 2018; Çoğaltay & Boz, 2023; Hayat et al., 2022; Kaya & Koçyiğit, 2023; Kılınç et al., 2023; Khan & Gupta, 2024; Liu et al., 2021; Liu et al., 2022; Özdemir et al., 2020; Xie et al., 2022).

A meta-analysis conducted by Alanoglu (2022) revealed a moderate correlation between teacher self-efficacy and principals' instructional leadership. Although this study provided valuable insights, its limitations as a literature review highlighted the need for empirical research. Calik et al.'s (2012) study in Turkish primary schools demonstrated a significant positive impact of instructional leadership on collective teacher efficacy. However, the study's focus on primary schools and non-Ugandan settings underscores the necessity for research within university contexts. Cansoy and Parlar's (2018) investigation in Istanbul schools revealed a significant positive relationship between teacher self-efficacy and school leadership. While this study encompassed various educational institutions, its exclusion of universities sparked interest in this investigation, which focuses on

academic institutions. Çoğaltay and Boz's (2023) review highlighted the positive influence of instructional leadership on collective teacher efficacy. Nevertheless, methodological flaws in the review necessitated this empirical study. Hayat et al.'s (2022) cross-sectional study in Iranian universities explored the relationship between teaching self-efficacy and bedside instruction quality among medical instructors, providing valuable insights into the complexities of instructional leadership and teacher efficacy. The Pearson correlation coefficient analysis revealed that teaching self-efficacy and teaching quality were positively and significantly correlated. However, a hospital setting was used for this investigation. Therefore, there was need to carry out a study in a university context.

Hosseingholizadeh et al. (2023) conducted a study in Iranian primary schools to explore the connection between principals' instructional leadership, collective teacher efficacy, teacher commitment, and professional development. The findings indicated that instructional leadership had a significant and positive impact on teachers' collective efficacy. However, this study presented a population gap as the study was done in primary schools whose job requirements are different from those of universities. Thus, the need for this study a universities' context.

A meta-analytic study conducted by Kaya and Koçyiğit (2023) investigated the interplay between teacher self-efficacy and transformational leadership, yielding findings that underscore the significant positive impact of leadership on teacher self-efficacy. However, the reliance on secondary data in this study created a knowledge gap, necessitating the present empirical investigation.

Khan and Gupta's (2024) research in India probed the mediating role of teacher self-efficacy in the relationship between instructional leadership and teacher job satisfaction among primary school educators. Their analysis revealed a

robust correlation between teachers' self-efficacy and principals' instructional leadership. Nevertheless, the study's focus on Indian primary school teachers raised questions about contextual differences and population-specific factors, highlighting the need for analogous research involving university professors in Uganda. In a separate study, Kılınç et al. (2023) examined the relationship between teacher self-efficacy and the instructional leadership of school administrators in Turkey, utilizing data from primary and secondary school educators in the Elazığ Center. Their multiple regression analysis revealed a significant correlation between teacher self-efficacy and instructional leadership. However, the study identified contextual and demographic gaps, which highlighted the need for further research conducted in Ugandan universities.

Liu et al.'s (2021) analysis of the 2013 Teaching and Learning International Survey data revealed a direct and positive correlation between instructional leadership and teacher self-efficacy, underscoring the importance of leadership in fostering teacher confidence. Although the study drew on global data, it highlighted the need for a Uganda-specific investigation. A subsequent large-scale survey conducted by Liu et al. (2022) in Chinese primary schools explored the interrelationships between student learning outcomes, teacher self-efficacy, and instructional leadership. The findings indicated a strong connection between principals' instructional leadership and teacher self-efficacy, as well as a positive correlation between both factors. However, the study's focus on primary schools outside Uganda emphasized the necessity for similar research within Ugandan university contexts.

Ma and Marion's (2021) study in Western China examined the impact of teachers' trust on the relationship between principal instructional leadership and

teacher efficacy. Their results showed that instructional leadership had a direct and positive influence on teacher efficacy. Given the study's non-Ugandan context, replicating this research within Ugandan public universities was deemed essential. Özdemir et al.'s (2020) mixed-methods study in Turkey analysed the effects of principals' instructional leadership on teachers' self-efficacy perceptions. Using standardized scales, they found a moderate yet significant association between principals' instructional leadership behaviours and teachers' self-efficacy, highlighting the critical role of leadership in shaping teacher confidence. Liu et al.'s (2021) analysis of the 2013 Teaching and Learning International Survey data uncovered a robust positive correlation between instructional leadership and teacher self-efficacy, emphasizing leadership's pivotal role in cultivating teacher confidence. Despite leveraging global data, the study underscored the necessity for Uganda-specific research. A follow-up large-scale survey by Liu et al. (2022) in Chinese primary schools probed the complex interplay between student learning outcomes, teacher self-efficacy, and instructional leadership. The findings revealed a strong synergy between principals' instructional leadership and teacher self-efficacy, along with a positive correlation between both factors. However, the study's focus on non-Ugandan primary schools highlighted the imperative for analogous research within Ugandan university settings. Ma and Marion's (2021) study in Western China investigated the moderating role of teachers' trust in the relationship between principal instructional leadership and teacher efficacy. Their results demonstrated a direct and positive impact of instructional leadership on teacher efficacy. Given the study's non-Ugandan context, replicating this research within Ugandan public universities became essential. Özdemir et al.'s (2020) mixed-methods study in Turkey examined the effects of principals' instructional

leadership on teachers' self-efficacy perceptions, employing standardized scales to reveal a moderate yet significant association between principals' instructional leadership behaviours and teachers' self-efficacy, underscoring leadership's critical influence on teacher confidence.

2.3.3 Self-efficacy and the Quality of Teaching: Self-efficacy encompasses an individual's conviction in their capacity to navigate and manage their environment, surmount challenges, and attain desirable outcomes. As a fundamental aspect of human self-awareness, self-efficacy plays a pivotal role in empowering individuals to overcome obstacles and achieve their goals (Hidayah et al., 2023). In the context of education, teacher self-efficacy refers to educators' confidence in their ability to design and implement instructional strategies that facilitate students' attainment of predetermined learning objectives (Yurtdakal & Karakas, 2021). This concept captures teachers' belief in their capacity to engage students in learning activities, even in the face of adversity, such as low student motivation (Sibagariang & Pandia, 2021). Consequently, self-efficacy emerges as a vital motivational trait among educators, reflecting their faith in their ability to influence student engagement and learning, particularly in challenging situations (Thommen et al., 2022).

As Kholifah et al. (2023) emphasize, self-efficacy is a critical determinant of instructional quality. Teachers who possess a strong sense of self-efficacy tend to exhibit greater confidence and effectiveness in navigating complex classroom situations, ultimately leading to superior teaching outcomes. Moreover, educators with high self-efficacy typically experience heightened job satisfaction, reduced burnout, and increased motivation to employ innovative teaching methods, overcome obstacles, and strive for excellence. These factors collectively contribute

to enhanced instructional quality. According to Thommen et al. (2022), self-efficacy beliefs also exert a profound influence on goal-setting, effort, and persistence, further impacting teaching effectiveness. Individuals with high self-efficacy tend to exhibit optimism and confidence, enabling them to surmount challenges and persist in the pursuit of success. In the teaching profession, self-efficacy is particularly salient, as it directly impacts the calibre of student learning.

To deliver high-quality instruction, teachers must first possess faith in their own abilities, underscoring the pivotal role of self-efficacy in shaping instructional excellence. The self-efficacy of educators is a pivotal factor in determining the effectiveness of their teaching practices, as highlighted by Hidayah et al. (2023). According to Nie et al. (2013), teacher self-efficacy encompasses multiple dimensions, including motivational strategies, behavioural control, instructional effectiveness, and overall personal confidence. A substantial body of research has investigated the relationship between self-efficacy and teaching quality, yielding insightful findings (e.g., Barni et al., 2019; Buric & Kim, 2020; Hidayah et al., 2023; Jaafari et al., 2023; Künsting et al., 2016; Lazarides et al., 2021; Main, 2020; Poulou et al., 2019; Thommen et al., 2022; Zee & Koomen, 2016).

Buric and Kim's (2020) study in Croatian high schools explored the interplay between student motivational beliefs, teacher self-efficacy, and teaching quality, revealing a positive correlation between teacher self-efficacy and various dimensions of teaching quality at the classroom level. However, the study's focus on high schools created a knowledge gap, emphasizing the need for similar research within Ugandan university contexts. A meta-analysis conducted by Hidayah et al. (2023) further underscored the significant impact of teacher efficacy on learning quality, highlighting its crucial role in determining instructional

effectiveness. Given the reliance on secondary data, this empirical investigation necessitated a Ugandan context to validate the findings.

Jaafari et al.'s (2023) study at Islamic Azad University in Tehran, Iran, probed the relationship between teaching quality and factors like self-efficacy, organizational commitment, and skills among faculty members. The results yielded a robust positive correlation between teaching quality and teacher self-efficacy. Nevertheless, the study's non-Ugandan setting underscored the imperative for context-specific research within Uganda. In a separate longitudinal study, Künsting et al. (2016) examined the predictive power of teachers' self-efficacy on instructional quality over an extended period. Conducted among German in-service teachers across three time points (2001, 2008 & 2011), their findings revealed that self-efficacy consistently emerged as a stable and reliable predictor of teaching quality, demonstrating its enduring impact on instructional effectiveness. The study's execution in a developed country, with its distinct working conditions, differed significantly from the context of Uganda, a developing nation. This discrepancy highlighted the necessity for replicating the study within Ugandan universities to ensure contextual relevance

Lazarides et al.'s (2021) investigation in Germany, involving students and their homeroom teachers, explored the interplay between teaching quality, teacher passion, and self-efficacy. Notably, the results yielded no significant correlation between changes in teaching quality and teachers reported self-efficacy, diverging from prevailing findings that often revealed a positive and substantial link. This anomaly created a knowledge gap, underscoring the importance of evaluating each study independently. Consequently, this investigation was warranted to provide clarity. Poulou et al.'s (2019) study in Central Greece probed the relationship

between classroom practices and teacher self-efficacy, focusing on educators in the region.

The study revealed a significant link between teachers' high self-efficacy perceptions and their effective teaching practices and classroom management skills. However, the distinct cultural and educational contexts of Greece and Uganda necessitated replicating the study within Ugandan universities. Romel et al.'s (2021) investigation in Ethiopia examined the inter relationships between contextual factors, self-efficacy, and instructional quality among primary school instructors. The findings demonstrated a positive correlation between teaching quality and self-efficacy perceptions. Nevertheless, the study's focus on primary instructors highlighted the need for analogous research within university settings. Thommen et al.'s (2022) study in England probed the connection between teacher self-efficacy and teaching quality, leveraging student evaluations. The results yielded a correlation between teacher self-efficacy and instructional quality, as rated by students. However, the study's execution in a developed country underscored the imperative for similar research in developing countries, such as Uganda, to ensure contextual relevance and generalizability.

Yildiz and Arici's (2021) study in Turkey investigated the impact of senior pre-service science teachers' self-efficacy beliefs on their perceptions of teaching quality. Through a mixed-methods approach, the findings revealed that these pre-service teachers held robust self-efficacy beliefs regarding their teaching abilities and instructional quality. However, their actual teaching abilities were found to be subpar, with inefficiencies in lesson planning and delivery. This study highlighted a critical empirical gap, emphasizing the need for further exploration of the self-efficacy-teaching quality nexus within the Ugandan context. A systematic review

by Zee and Koomen (2016) examined the relationship between teacher self-efficacy and the quality of classroom processes, yielding a positive correlation between teacher efficacy and effective teaching practices. While this review provided valuable insights, its reliance on existing literature underscores the importance of conducting empirical research to validate these findings. Although the aforementioned studies underscored the connection between teaching self-efficacy and teaching quality, the conceptual literature suggests that this relationship is multifaceted, encompassing personal efficacy, behaviour management efficacy, instructional strategy efficacy, and motivational strategy efficacy. The subsequent section delves into the literature on constructs related to teaching quality.

2.3.3.1 Personal Sense of Efficacy and Teaching Quality: A teacher's personal sense of efficacy refers to their conviction in their ability to foster student engagement, improve learning outcomes, and manage challenging students effectively (Yough, 2019). This concept embodies a teacher's confidence in fulfilling their professional responsibilities, navigating commitments, and overcoming inherent challenges (Barni et al., 2019). It encompasses an individual's perceptions of their capacity to attain specific goals, approach problems, and drive motivation (Alibakhshi et al., 2020). Teacher self-efficacy, a related concept, pertains to educators' belief in their ability to create a supportive learning environment through effective instructional planning, organization, and execution (Poulou et al., 2019). This notion involves the ability to develop and apply teaching strategies, persevere through difficulties, and employ effective problem-solving skills. In education, teacher self-efficacy is characterized by confidence in one's

ability to enhance student learning outcomes despite challenges (Alibakhshi et al., 2020).

A robust sense of self-efficacy empowers teachers to equip students with essential knowledge, foster adaptability and resilience, and innovate while staying abreast of trends. The professional abilities of educators are closely tied to their belief in their capacity to provide high-quality education. A strong personal sense of self-efficacy is essential for teachers to cultivate a positive learning environment. Consequently, teachers' beliefs in their abilities significantly influence their classroom practices and the overall teaching-learning process. The skills and abilities of teachers play a vital role in ensuring quality teaching and addressing instructional challenges. When teachers exude confidence in their teaching capabilities, student achievement tends to improve (Orakcı et al., (2023) suggest that educators with a robust sense of self-efficacy tend to take ownership of their students' progress, leveraging innovative teaching methods and strategies to drive improvement. This underscores a clear connection between teachers' personal sense of efficacy and instructional quality.

Alibakhshi et al.'s (2020) qualitative study, conducted with teachers from Iran's Zabankedeh Meli language institute, explored the impact of teachers' self-efficacy on their teaching practices. The results revealed that teachers' personal sense of self-efficacy significantly influenced their teaching methods, with strong self-efficacy beliefs leading to effective teaching practices and enhanced instructional quality. However, the study's qualitative nature limited the generalizability of its findings, emphasizing the need for a quantitative study with broader applicability. Holzberger and Prestele's (2021) investigation of the relationship between teacher self-efficacy and self-reported instructional quality,

focusing on cognitive activation and classroom management among Austrian teachers, yielded significant correlations between teacher self-efficacy and teaching quality. As this study was conducted in a well-established educational context, replicating the research in Ugandan universities is necessary to ensure contextual relevance.

The study's focus on elementary and secondary educators, to the exclusion of university-level instructors, highlighted a research gap in university settings. Sehgal et al.'s (2017) investigation into the relationship between teacher self-efficacy and teacher effectiveness, based on secondary school teachers' student outcomes, revealed a positive correlation between teacher self-efficacy and effectiveness in areas such as course delivery, teacher-student interactions, and student learning regulation – all key indicators of high-quality teaching. Yildiz and Arici's (2021) study in Turkey explored the impact of senior pre-service science teachers' self-efficacy beliefs on their teaching quality. The findings indicated that these pre-service teachers held strong self-efficacy perceptions regarding their teaching abilities, yet their actual teaching abilities fell below the median, with inefficiencies in lesson planning and delivery. This study identified an empirical gap, emphasizing the need for further research into the self-efficacy-teaching quality relationship within the Ugandan context. The empirical and contextual gaps, coupled with the scarcity of literature on personal sense of efficacy in the aforementioned studies, provided the impetus for this investigation.

2.3.3.2 Efficacy of Behaviour Management and Teaching Quality: Behaviour management encompasses teachers' ability to establish clear expectations for student conduct and encourage responsible behaviour through the implementation of diverse motivational strategies. According to Kumar and Liu (2019), behaviour

management refers to efforts made by teachers in order to create an atmosphere in which students can learn not just academically but also socially and economically. Behaviour management refers to the teacher's actions to promote order and engage or elicit student cooperation in positive social contact, active involvement in learning, and self-motivation (Mitchell, 2019). Thus, behaviour management is the process of managing students' behaviour in order to maintain order and encourage their participation in learning. This suggests that behaviour management efficacy represents teachers' confidence in their capacity to shape students' behaviour, thereby fostering a productive learning environment and promoting student engagement.

Shah (2023) categorizes behaviour management strategies into four distinct approaches: affirmative behavioural reinforcement, corrective feedback, proactive measures, and directive instructions. Conversely, Mitchell (2019) identifies a slightly different taxonomy, comprising preventive, reward-based, initial corrective, and corrective strategies. Meanwhile, Adibsereshki et al.'s (2014) investigation examined the impact of classroom reinforcement techniques on the academic achievement of middle school students in Tehran province, shedding light on the role of behavioural interventions in shaping student outcomes. The results showed that reinforcement considerably increased pupils' academic achievement. This indicated that reinforcement improved teaching quality. Gooch (2017) conducted a study in the United States to examine how positive and negative reinforcement influenced student behaviour in a second-grade classroom of Native American students, Hispanic, and African American pupils. The findings demonstrated that when properly executed, cooperative discipline was more effective than assertive discipline in discouraging problem behaviour in kids. This

resulted in improved teaching quality in schools. Hasnah (2017) conducted a critical evaluation on the impact of teachers as role models in developing students' character.

According to the review, instructors' attributes such as dedication to their profession, encouragement of students, and appreciation for diversity brought a diverse set of skills and talents to the classroom, fostered critical thinking, and emphasized teamwork among students. However, because this study concentrated on secondary data, another investigation focusing on source data was required. Khalid et al. (2021) investigated the efficiency of reinforcement and punishment in the learning environment employing students from schools in Charsadda, Pakistan. The findings revealed that when students received reinforcement and were penalized, they performed better than when they did not, although reinforcement was more effective than punishment in enhancing student performance. As a result, applying reinforcement to manage behaviour leads to improved teacher quality. Mustafa's (2022) study in Aceh, Indonesia, probed the nexus between behavioural management skills and instructional management, yielding a positive and significant correlation between the two variables. This correlation underscored their interconnectedness with teaching quality. Although prior research intimates a relationship between behaviour control efficacy and teaching quality, a thorough literature review revealed a paucity of research on this specific topic. This knowledge gap underscored the necessity for this empirical investigation, which aims to contribute meaningfully to the existing body of knowledge.

2.3.3.3 Efficacy in Instructional Strategies and Teaching Quality: Teachers employ instructional strategies to foster autonomy and strategic learning in their students,

empowering them to take ownership of their educational journey (Crebillo, 2021). As Baafi (2020) notes, instructional strategies encompass the deliberate methods and techniques that educators utilize to facilitate student learning and promote academic success. According to Suman (2021), instructional strategies involve well-organised lesson plans that define a clear structure, set learning goals, and outline specific actions to achieve those goals. Essentially, these strategies serve as a guide for educators, helping them lead students toward achieving targeted learning outcomes by using purposeful and specialised approaches and techniques tailored to facilitate effective learning. Simply put, instructional strategies refer to the deliberate plans and methods teachers employ to attain teaching goals. From a practical perspective, instructional techniques represent the approaches teachers use to deliver instructional content. Ultimately, an effective instructional strategy should delineate the teaching resources and techniques necessary to empower students to achieve their learning objectives (Hill & Jordan, 2021).

Instructional strategy effectiveness refers to a teacher's ability to implement methods that foster meaningful learning experiences for students. Effective teaching strategies enhance students' cognitive abilities by facilitating concept articulation, collaborative problem-solving, and critical thinking. These strategies also promote active engagement, teamwork, and collective problem-solving. To be considered effective, instructional strategies must provide authentic learning activities that enable students to discover knowledge and contribute to the learning process in a meaningful way. As Onajite et al. (2019) emphasise, teachers' instructional strategies should convey subject matter in a relevant, accessible, and engaging manner. Instructional methods play a pivotal role in determining teaching quality and the overall classroom experience. Therefore, instructional strategies

should outline the materials, components, and methods to be employed, ensuring alignment with resources to support students in achieving desired learning outcomes.

A study by Adediran et al. (2015) in Nigerian secondary schools revealed that teaching strategies significantly impacted teaching effectiveness and learning outcomes, highlighting the influence of instructional efficacy on overall teaching quality. However, this study's focus on secondary schools created a research gap in the university context, necessitating this investigation. Meanwhile, Cheng et al.'s (2019) meta-analysis compared the effectiveness of flipped classroom instructional techniques versus traditional methods, shedding light on the impact of innovative instructional strategies on student learning. The findings demonstrated a significant correlation between effective teaching tactics and enhanced student learning outcomes, implying that teachers' instructional self-efficacy played a pivotal role in improving teaching quality and yielding positive student results. However, the reliance on secondary data posed a methodological limitation, underscoring the need for primary research in the context of Ugandan universities. Le Donné et al.'s (2016) cross-national study, spanning Portugal, Australia, Finland, Latvia, Mexico, and Spain, explored the relationship between mathematics teachers' instructional approaches and student learning outcomes. The results showed that teaching strategies emphasizing active learning, cognitive engagement, and teacher-directed instruction were positively linked to improvements in student skills. Nonetheless, the study revealed a weaker association in schools serving socioeconomically disadvantaged students. Additionally, teacher self-efficacy and collaborative practices were found to be significant predictors of cognitive activation strategies and active learning approaches.

The impact of instructional strategies on teaching quality was found to be contingent upon various factors, rather than being predetermined. This realisation prompted the present study in Uganda to investigate the relationship between instructional efficacy and teaching quality in Ugandan universities. Francisco and Celon's (2020) study in the Philippines explored the effect of teachers' instructional methods on students' academic performance, revealing a significant positive correlation between the two. Notably, their findings indicated that even minor improvements in instructional management techniques yielded significant gains in student academic achievement. Consequently, teachers' instructional efficacy emerged as a critical factor in enhancing teaching quality. However, the contextual differences between the Philippines and Uganda underscored the need for a localized study. Meanwhile, Munna and Kalam's (2021) assessment of the teaching-learning process highlighted the pivotal role of instructional methods in influencing teaching efficacy, thereby establishing a link between teaching strategies and overall teaching quality.

2.3.3.4 Efficacy in Strategies for Motivation and Teaching Quality: Motivation serves as the dynamic catalyst that empowers individuals to strive for their objectives and exhibit specific behaviours within a particular context (Davidovitch & Dorot, 2023). By triggering the initial spark of learning, motivation subsequently fuels the persistence and dedication required to navigate the often demanding and prolonged process of knowledge acquisition. Students are driven to reach their learning objectives, with motivation playing a crucial role in their willingness to put forth effort and persist through the learning journey. Teachers, in turn, play a central role in fostering and maintaining student engagement throughout their academic experiences. Motivation is the underlying driver that propels individuals

toward their objectives, influencing their behaviour and decision-making within specific environments (Davidovitch & Dorot, 2023).

It serves as the initial catalyst for learning and continues to fuel the often-challenging process of learning over time. Motivation enables learners to acquire knowledge and skills, even when their abilities may be limited. It is a crucial factor for completing learning tasks and serves as the driving force behind the educational process (Al-Said, 2023). Fostering student engagement is crucial for curriculum coordination, as it has a profound impact on the overall dynamics of the teaching-learning environment. Learner motivation is a pivotal factor in determining the efficacy of the learning process, driving students to attain their academic objectives. Recognizing the importance of motivation is essential for effective pedagogy, as learners' motivational levels significantly influence their educational experience, making it a critical component of successful teaching practices. Learning is inherently challenging, pushing the brain to its limits, and can only be achieved with motivation. A student's desire to learn is particularly crucial, as mere attendance in class does not necessarily indicate a willingness to engage in learning. It simply reflects those students are part of a system where attending school is mandatory.

Highly motivated students tend to learn quickly and make the teaching process enjoyable, while those with little motivation often learn less and can make teaching more difficult and frustrating (Filgona et al., 2020). While motivation helps students learn, it is not solely dependent on their own motivation. Educators serve as catalysts for student success, providing motivational support that empowers learners to reach their full academic potential. By fostering a sense of autonomy, relevance, relatedness, and competence, educators can significantly

increase students' drive to engage in their studies. Additionally, showing genuine interest in the subject and promoting self-efficacy are other ways teachers can inspire students to be more motivated to learn. The teacher must establish an environment that encourages pupils' learning. Teachers have a critical role in creating an environment that promotes student learning. This is due to their support for student autonomy. Teachers help pupils identify with themselves, their own interests, and their values by allowing them to make their own choices.

Teachers enhance motivation by encouraging students' choices and interests. Teachers also assist students learn by enhancing their responsibility and engagement in their own education by allowing them to choose their own goals and objectives. Teachers' self-efficacy in inspiring students is a critical factor influencing students' motivation to learn (Johnson, 2017). Educators bear the responsibility of fostering a motivating environment that encourages students to engage in the learning process. As Filgona et al. (2020) emphasize, teachers should inspire students to develop an intrinsic desire to learn and grow. Al-Said's (2023) investigation into factors boosting students' motivation in modern isolation settings revealed that motivation plays a pivotal role in sparking interest in learning. The study highlighted those effective motivational strategies directly impact teaching success.

However, the study's focus on Jordanian universities necessitated a similar investigation within the Ugandan context. Filgona et al.'s (2020) review identified strategies for motivating learners, concluding that teachers who create active learning environments, promote autonomy and competence, and design engaging activities can enhance students' learning outcomes. This suggests that educators who employ effective motivational strategies are more likely to maintain high

teaching standards. However, the study's focus on high school students sparked interest in exploring similar research at the university level. Toka and Imakulata's (2019) study at the University of Nusa Cendana in Indonesia examined the direct impact of motivation on learning behaviour and academic achievement, providing valuable insights into the university context. Their research yielded a significant correlation between the application of motivational strategies and improved learning outcomes, underscoring the pivotal role of motivational techniques in elevating the quality of learning experiences. However, the study's external context raised questions about its applicability within Uganda's educational landscape. Consequently, this underscored the imperative for localised research to elucidate the complex interplay between educators' strategies for motivation and learning outcomes within the Ugandan context.

2.3.4 Exploring the Mediating Role of Teacher Self-Efficacy in the Relationship between Instructional Leadership and Teaching Excellence: The preceding literature review underscores the pivotal roles of leadership and self-efficacy in shaping teaching quality. This study proposes a nuanced perspective, suggesting that self-efficacy serves as a mediator in the relationship between instructional leadership and teaching quality. Existing research (Bellibaş et al., 2020; Goddard et al., 2015; Herawati & Tjahjono, 2020; Mwansa, 2019; Sehgal, 2015; Zainal & Matore, 2021) has explored the mediating effect of self-efficacy on the leadership-teaching quality dynamic. Notably, Bellibaş et al.'s (2021) cross-national study examined the impact of instructional and distributed leadership on teaching quality, surveying primary school teachers from 32 OECD countries. The findings revealed that professional development and self-efficacy acted as

crucial mediators, bridging the gap between principals' leadership behaviors and teachers' instructional practices.

Furthermore, the study's scope was distinguished by its focus on both primary schools and high-performing countries, where educators typically possess advanced skills due to the supportive educational ecosystem. These contextual gaps prompted an investigation in a developing country, specifically within a university setting. Goddard et al.'s (2015) study, conducted with primary school teachers in the Midwestern United States, examined the interconnections between principal leadership, teacher collaboration, collective efficacy beliefs, and student achievement. The results showed that head teachers' leadership influenced teachers' collective efficacy beliefs, which in turn enhanced instructional quality through collaborative teacher efforts that reinforced school belief systems and supported student learning. However, this study, similar to its predecessors, was limited to a developed country context, highlighting the need for research within universities in developing nations. Herawati and Tjahjono (2020) proposed a theoretical model, suggesting that teacher self-efficacy mediates the relationship between principals' instructional leadership and teachers' professional competence.

However, this model remains untested, necessitating further empirical investigation. In contrast, Mwansa's (2019) study in Chikankata, Zambia, explored the relationship between school principals' leadership styles, teacher efficacy, and student achievement in elementary and secondary schools, yielding unexpected findings that revealed no significant connections between these factors. A notable lacuna in the existing literature reveals a lack of scholarly consensus regarding the interplay between instructional leadership, self-efficacy,

and instructional quality, highlighting the imperative for further empirical exploration. Sehgal's (2015) study in Indian private schools investigated the nexus between teacher self-efficacy, principal leadership, and teacher effectiveness. The findings demonstrated a significant positive correlation between principal leadership and teacher self-efficacy, with teachers exhibiting higher self-efficacy displaying enhanced effectiveness. Nonetheless, this study's non-university setting underscored the need for targeted research within higher education institutions to elucidate the mediating role of self-efficacy in the relationship between instructional leadership and teaching quality.

Zainal and Matore's (2021) study probed the interplay between Malaysian school principals' leadership approaches, teachers' self-efficacy, and teaching quality, with a specific emphasis on innovative behaviours among educators. The findings revealed that principals' transformational leadership, coupled with teachers' self-efficacy, positively impacted teaching quality, manifesting in innovative practices. However, the study's conflation of instructional leadership with transformational leadership exposed a conceptual gap, necessitating further exploration. This research aimed to investigate the relationship between instructional leadership and teaching quality, with teachers' self-efficacy acting as a mediating factor. The study focused on specific dimensions of instructional leadership, including supervisory and evaluative practices, curriculum coordination, professional development initiatives, and student progress monitoring.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter provides an in-depth examination of the philosophical underpinnings that inform the proposed study, followed by a detailed exposition of the research methodology. In structuring the investigation, this study adheres to the conceptual framework of the "research onion model" (Saunders et al., 2018), a multifaceted approach that systematically peels away the layers of research design. This model comprises seven interconnected elements: philosophical perspectives, which establish the foundational worldview; research approaches, which dictate the overall research strategy; methodological options, which guide the selection of research methods; strategies, which outline the general plan for data collection and analysis; timeframes, which specify the temporal scope of the study; and specific techniques and procedures, which detail the precise methods and tools employed to carry out the investigation. By adopting this comprehensive framework, this study ensures a rigorous, systematic, and transparent approach to exploring the research questions.

3.1 The Philosophical Orientation

This study was rooted in the positivist research philosophy, initially proposed by Auguste Comte in 1856. This paradigm utilises the hypothetical-deductive method to test pre-established hypotheses, typically focusing on quantifiable data, and aims to identify functional relationships between independent variables (causal factors) and dependent variables (outcomes) (Park et al., 2020). Guided by an objective ontology, researchers operating within this framework assume that knowledge and reality exist independently of the researcher, and are therefore

measurable, verifiable, quantifiable and accurate (Maksimovic & Evtimov, 2023).

The researcher posited that an independent reality exists, one that can be uncovered through traditional scientific techniques, especially statistical methods.

From an epistemological standpoint, the study aimed to define reality through quantitative methods. Objective epistemology holds that knowledge is value-neutral, focusing on gathering perspectives from respondents. Consequently, the study aimed to uncover truth based on measurable data, with the goal of making generalisations (Otoo, 2020). This research endeavoured to establish causal relationships by formulating and testing hypotheses, thereby facilitating predictions and broader generalisability. To maintain objectivity, the findings were reported in a formal, impersonal tone, as advocated by Taylor and Goodall (2019). By adopting this stance, the researcher ensured a clear distinction between themselves and the study, focusing on the empirical measurement of variables and the rigorous testing of hypotheses to elucidate broader causal explanations. This approach enabled the researcher to maintain objectivity and detachment from the respondents, prioritising the scientific rigor and integrity of the investigation.

3.2 The Research Approach

This study employed a quantitative research paradigm to investigate the research phenomenon, leveraging a theoretical framework that relies on numerical data and statistical analysis to extrapolate findings to a broader context (Farghaly, 2018). The investigation involved the collection and analysis of quantitative data, utilising a dual-pronged statistical approach that combined descriptive and inferential methods. Grounded in positivist research philosophy, this quantitative approach aimed to provide an objective, empirical understanding of the variables

under scrutiny (Loannidis & Maniadis, 2023). By integrating descriptive and inferential statistics, the study offered a comprehensive examination of the research topic. Descriptive statistics facilitated the summarisation and characterisation of key data features, while inferential statistics enabled the researcher to draw generalisable inferences about the larger population based on the sample data.

3.3 Study Design

To investigate the interconnections among the study's variables, a cross-sectional correlational research survey design was adopted, providing a snapshot of the relationships between the variables of interest at a single point in time. This design was selected due to its effectiveness in analysing the associations between variables at a single moment in time (Bryman, 2016). The design provides a snapshot of the population at a particular moment, allowing researchers to identify patterns and trends (Creswell, 2014). Cross-sectional designs are useful for identifying correlations and associations between variables, which can inform future research studies (Saunders et al., 2019). Moreover, cross-sectional research designs offer a valuable methodology for capturing phenomena at a specific moment, providing a snapshot of the prevailing conditions.

The correlational research design, in particular, proves instrumental in assessing the nature and intensity of interactions between variables, potentially uncovering intricate patterns or linkages that may exist (Bloomfield & Fisher, 2019). By leveraging this design, researchers can systematically examine the relationships within a population or between multiple variables of interest, thereby elucidating the complex interplay between these factors (Siedlecki, 2020). In the context of this study, the correlational research design was

deliberately employed to investigate the relationships between instructional leadership, self-efficacy, and teaching quality among academic staff. This design enabled the generation of findings that can be generalised, providing valuable insights into the dynamics between these critical variables and informing evidence-based practices in educational settings, particularly public universities.

3.4 The Research Population

The study's population consisted of a diverse and sizable cohort of 2,225 academic staff members, all of whom were employed by public universities in Uganda. This population was strategically sampled from four reputable institutions, each contributing a distinct subset of faculty: Busitema University, with its 245 staff members; Gulu University, comprising 152 staff; Makerere University, boasting the largest contingent with 1,492 staff; and Mbarara University of Science and Technology, with 336 staff members. By drawing from these four institutions, the study aimed to capture a representative cross-section of academic staff experiences, perspectives, and practices within Uganda's public university sector.

3.5 Sample Size Determination

A representative sample of 327 academic staff members were selected for the questionnaire survey, guided by the sample size determination table proposed by Krejcie and Morgan (1970). To ensure proportional representation from each of the four participating universities, the sample size for each institution was calculated using a proportionate sampling formula, which took into account the relative size of each university's academic staff within the overall population. This calculation was applied as follows:

Proportion Sample: $n_1 = \frac{\text{size of entire sample}}{\text{target population}} \times \text{sample size}$

For example, the sample for Busitema was determined as follows:

$$n_1 = \frac{245}{2225} \times 327 = 36$$

Table 3.1: Study Population, Sample and Sampling Technique

University	Population	Sample
Busitema	245	36
Gulu	152	22
Makerere	1492	219
Mbarara	336	50
Total	2225	327

Data Source: NCHE State of Higher Education in Uganda (2018/2019)

3.5.1 Sample Size Determination

The simple random sampling, a probability sampling method that guarantees every individual in the population has an equal opportunity to be chosen as a respondent (Rahaman et al., 2022), was used in the study. This method enables the researchers to create a representative sample, free from bias and interference, allowing for reliable and generalisable findings. To minimise sampling errors and guarantee a faithful representation of the target population's characteristics, the study utilized simple random sampling. This approach relied on a comprehensive sampling frame, which comprised an exhaustive list of all individuals within the target population. By employing this method, the study ensured that the selected sample was genuinely representative, with each individual having an equal chance of being selected, thereby maximising the generalisability and reliability of the findings.

3.6 Variable Measurement

The research examined several key variables: teaching quality (dependent variable), instructional leadership (independent variable), and self-efficacy (mediating variables). Table 3.2 outlines how these variables were measured.

Table 3.2: Measures of the Variables and their Sources

Variable	Nature of Variable	Indicators	Source and Reliabilities
Teaching quality	Dependent Variable	Classroom Management	Jentsch & Schlesinger (2017) (7 items), $\alpha = 0.83$,
		Personal Learning Support	(6 items), $\alpha = 0.714$)
		Cognitive Activation	(7 items), $\alpha = .821$)
Instructional Leadership	Independent Variable	Instructional supervision	Liu et al. (2022) (6 items), $\alpha = 0.94$
		Curriculum coordination	Akram et al. (2017) (7 items), $\alpha = 0.80$
		Professional Development	Mourão et al. (2022) (7 items), $\alpha = 0.82$
		Monitoring	Akram et al. (2017)
		Student Progress	(5 items), $\alpha = 0.78$
Self-efficacy	Mediating Variable	Personal Sense of efficacy	Fisher (2017) (9 items), $\alpha = 0.87$
		Behaviour Management Efficacy	Slater & Main (2020) (8 items), $\alpha = 0.90$
		Instructional Strategies Efficacy	(6 items), $\alpha = 0.79$
		Motivational Strategies Efficacy	Ghassemi & Karimi (2021)
			(8 items), $\alpha = 0.84$

3.7 The Research Instrument

Data for this study were collected from academic staff through a self-administered questionnaire. The questionnaire was designed based on tools used in previous

studies (referenced in Table 3.2). It utilized a five-point Likert scale to measure responses, ranging from 1 (Strongly disagree) to 5 (Strongly agree). The questionnaire was organized into sections, with Section A gathering background information on participants, including their gender, marital status, highest academic qualification, appointment level, and roles within the university. The section also explored the hierarchy and duration of respondents' teaching experience at their current institutions. Section B focused on teaching quality, examining three key areas: cognitive activation teaching strategies (CATS), classroom management (CM), and personal learning support (PLS). Respondents were asked to evaluate the extent to which these practices were reflected in their teaching.

Section C addressed instructional leadership, covering four sub-categories: instructional supervision (ISE), curriculum instruction coordination (CI), professional development (PD), and monitoring student progress (MSP). Participants indicated the degree of instructional leadership practices they encountered at their universities. Finally, Section D assessed teacher self-efficacy, divided into four sub-sections: personal sense of efficacy (PSF), behaviour management efficacy (BME), instructional strategies efficacy (ISE), and motivational strategies efficacy (ME). In this section, respondents evaluated how strongly they felt these aspects of self-efficacy were present in their work.

3.8 Quality of Data Control

To safeguard the dependability and accuracy of the collected data, a pilot study was conducted involving 50 academic staff members from a public university that was not part of the final sample. This pilot data was subjected to rigorous validity and reliability assessments using SmartPLS for Partial Least Squares Structural

Equation Modeling (Jhantasana, 2023). The sample size of 50 was deliberately chosen for its suitability in conducting validity and reliability tests within the SmartPLS framework. The ensuing results are presented in a sequential manner, with the validity assessments preceding the reliability tests, to provide a comprehensive evaluation of the data's trustworthiness.

3.8.1 Validity of the Instrument: Validity denotes the extent to which a measurement instrument successfully captures the underlying construct or phenomenon it purports to assess, thereby ensuring that the data collected accurately reflect the intended concept (de Souza et al., 2017). To assess validity, SmartPLS 4 was used, and content validity was examined through both convergent and discriminant validity using pilot data. To evaluate the construct validity of the measurement model, a multi-step approach was employed. Convergent validity was assessed by examining the average variance extracted (AVE) values, while discriminant validity was evaluated using the heterotrait-monotrait (HTMT) ratio of correlations.

Following data collection, Confirmatory Factor Analysis (CFA) was conducted to validate the factor structure, with indicators exhibiting factor loadings above 0.50 deemed valid (Hair, 2021). The results of the factor analysis, including various structural equation models, are presented in Chapter 4. Conversely, items with loadings below 0.50 were systematically excluded from further analysis (Shrestha, 2021). The findings pertaining to convergent and discriminant validity are summarised in Table 3, providing insight into the validity of the measurement model.

Table 3.3 Average Variance Extracted (AVE) and Heterotrait- Monotrait (HTMT) Discriminant Validity assessment

Measures	AVE	TQ	CM	CA	PLS	
TQ						
CM	0.639	0.725				
CA	0.575	0.100	0.109			
PLS	0.532	0.847	0.854	0.516		
Measures	AVE	IL	CC	IS	MSP	PD
IL						
CC	0.588	0.499				
IS	0.581	0.798	0.737			
MSP	0.615	0.399	0.250	0.774		
PD	0.538	0.375	0.299	0.809	0.742	
Measures	AVE	TSE	BME	ISE	MSE	PSE
TSE						
BME	0.536	0.471				
ISE	0.670	0.301	0.523			
MSE	0.599	0.765	0.322	0.226		
PSE	0.529	0.851	0.751	0.622	0.811	

Source: Survey Data, 2023

Notations: BME= Behaviour Management Efficacy, CA = Cognitive Activation, CC= Curriculum coordination, CM = Classroom Management, IS= Instructional Supervision, ISE = Instructional Strategies Efficacy, MSE = Motivational Strategies Efficacy, MSP = Monitoring Students' Progress, PD = Professional Development, PLS = Personal Learning Support, PSE = Personal Sense of Efficacy, TSE = Teacher Self-Efficacy, TQ = Teaching Quality, IL= Instructional Leadership.

The convergent validity assessment yielded favourable results, with all Average Variance Extracted (AVE) values surpassing the threshold of 0.5, thereby confirming the convergent validity of the constructs. Furthermore, the

Heterotrait-Monotrait (HTM) ratio of correlations remained below the recommended ceiling of 0.9 (Purwanto & Sudargini, 2021), indicating that the constructs demonstrated satisfactory discriminant validity. These findings collectively suggest that the measurement instrument exhibited robust validity, with constructs that not only converged on their intended variables but also maintained distinctiveness from one another, thus providing a reliable foundation for subsequent analysis.

3.8.2 The Reliability of Instruments: Reliability pertains to the instrument's capacity to yield consistent measurements, ensuring the dependability and uniformity of the data collected (Mohajan, 2017; Kubai, 2016; Ahmed & Ishtiaq, 2021). In essence, a reliable measurement instrument consistently produces the same results when applied under similar conditions, thereby demonstrating methodological consistency. To evaluate the internal consistency of scale items, composite reliability also known as construct reliability – is employed, with a threshold of 0.70 or higher indicating satisfactory reliability (Dash & Paul, 2021). While Cronbach's Alpha is a statistical tool used to assess the suitability of research metrics, it has limitations, particularly its assumption of uniform indicator traits, which can lead to underestimated reliability values (Taber, 2018). Consequently, Composite Reliability is preferred over Cronbach's Alpha when evaluating reliability due to its robustness and accuracy.

Moreover, Cronbach's Alpha is susceptible to scale length biases, which can lead to underestimations of internal consistency reliability (Hair Jr. et al., 2014). In contrast, Composite Reliability provides a more nuanced estimate, taking into account the external characteristics of indicator variables, thereby offering a more comprehensive assessment of reliability (Dash & Paul, 2021).

This study employed both Cronbach's Alpha and Composite Reliability to evaluate reliability. However, due to Cronbach's Alpha's limitation of assuming uniform indicator traits across the population, which can compromise reliability values (Viladrich et al., 2017), Composite Reliability was given precedence. This approach allowed for a more robust evaluation of reliability, potentially increasing the number of indicators meeting reliability thresholds. The results of the reliability analysis are presented in Table 3.4.

Table 3.4: Reliability Results

Measures	A	CR
Classroom Management	0.905	0.925
Cognitive Activation	0.876	0.904
Personal Learning Support	0.837	0.882
Curriculum Coordination	0.882	0.909
Instructional Supervision	0.853	0.892
Monitoring Student Progress	0.841	0.887
Professional Development	0.855	0.890
Behaviour Management	0.827	0.874
Instructional Strategies	0.898	0.923
Motivational Strategies	0.885	0.912
Personal Sense	0.878	0.905

The reliability analysis results presented in Table 3.3 reveal that both Cronbach's Alpha and composite reliability values exceeded the recommended threshold of 0.70 (Purwanto & Sudargini, 2021), thereby confirming the reliability of the indicators across various constructs. This finding suggests that the measurement instruments demonstrated strong internal consistency, with highly correlated indicators that collectively captured the underlying variables. Consequently, the data collected was deemed reliable, as the indicators exhibited a high degree of interrelatedness, providing a robust foundation for further analysis.

3.9 The Data Collection Procedure

The proposal underwent a rigorous approval process, commencing with submission to the Higher Degree Committee of the School of Education at Kyambogo University. Upon initial approval, it was forwarded to the Directorate of Research and Graduate Training, which subsequently cleared it for review by the Research Ethics Committee to ascertain its scientific and ethical soundness. Finally, the proposal was submitted to the Uganda National Council for Science and Technology, which granted clearance after verifying that the research protocol adhered to stringent ethical standards, posed no risk of harm to participants, and promised to yield valuable contributions to the field.

Thereafter, the proposal received endorsement from the Uganda National Council for Science and Technology, which verified its compliance with ethical protocols, ensured participant safety, and recognised its potential to enrich the existing knowledge base. Additionally, an introductory letter from the Director, Directorate of Research and Graduate Training, Kyambogo University, was obtained, formally introducing the researcher and legitimising the study, which was taken to the University Secretaries of Makerere, Gulu, Mbarara and Busitema universities to grant permission to collect data from those universities, was sought and all the university secretaries granted permission to collect data from the respective universities.

3.10 Data Management

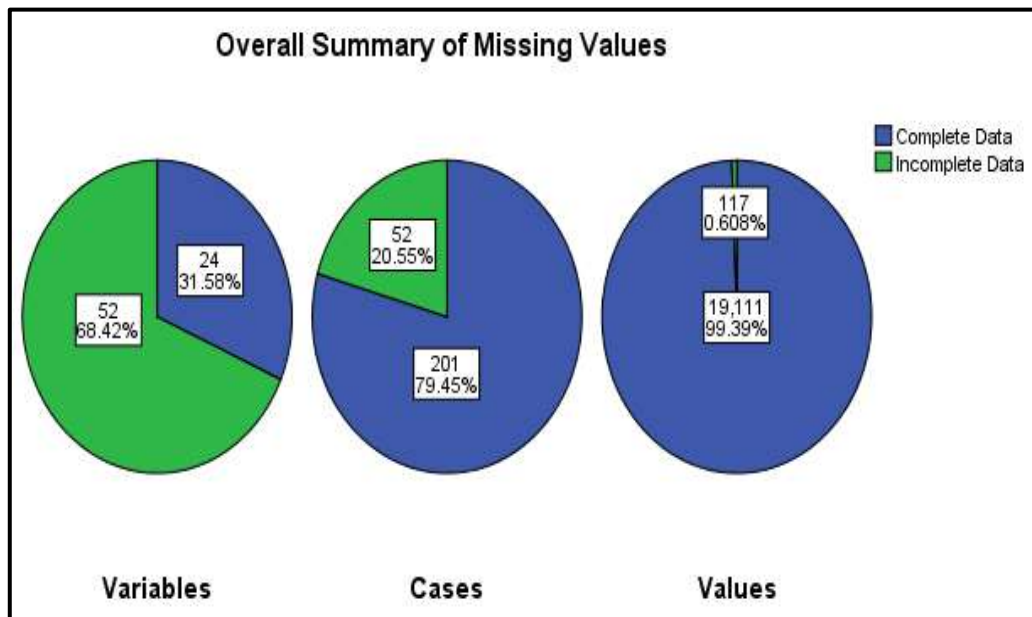
Prior to analysis, the collected data underwent a preliminary processing phase. This phase entailed assigning numerical codes to the data and subsequently entering it into the Statistical Package for the Social Sciences (SPSS) software, as recommended by Şahin and Aybek (2019), to facilitate efficient data management

and analysis. Data was also presented and screened to identify outliers and remove them, and to detect missing data and replace it. Data was further subjected to parametric tests namely; normality, linearity and collinearity. The data processing follows here under.

3.10.1 Outlier Detection and Handling Outliers: After data entry, frequency tables were drawn and displayed to identify outliers. The frequency tables were examined to detect extreme values as a result of wrong data entry or error in data entry. The detected outliers were removed and replaced with correct values after comparing them with the original data entered by the respondents in a cell in the questionnaire. This ensured that outlier data which could have led to exaggerated results was removed.

3.10.2 Missing Data Analysis: Missing data describes the situation in which data is incomplete, that is to say, data values for a single indicator or several indicators were not scored or were incorrectly completed. Promptly detecting and resolving missing data issues is imperative, as unaddressed gaps can compromise the sample's representativeness, inject bias, and erode the statistical robustness of the analysis, ultimately leading to flawed inferences about the population under study (Tsiampalis & Panagiotakos, 2020). Treatment of missing data depends on the level of how much of it is missing. When in a questionnaire, missing data exceeds 15%, the specific questionnaire (case) is definitely excluded from the data file. However, a case may not be removed if the overall missing data is below/above the threshold. In instances where data for a complete construct is missing, the conventional approach is to exclude it from the analysis to maintain data integrity (Hair Jr. et al., 2021). The prevalence and distribution of missing data within the

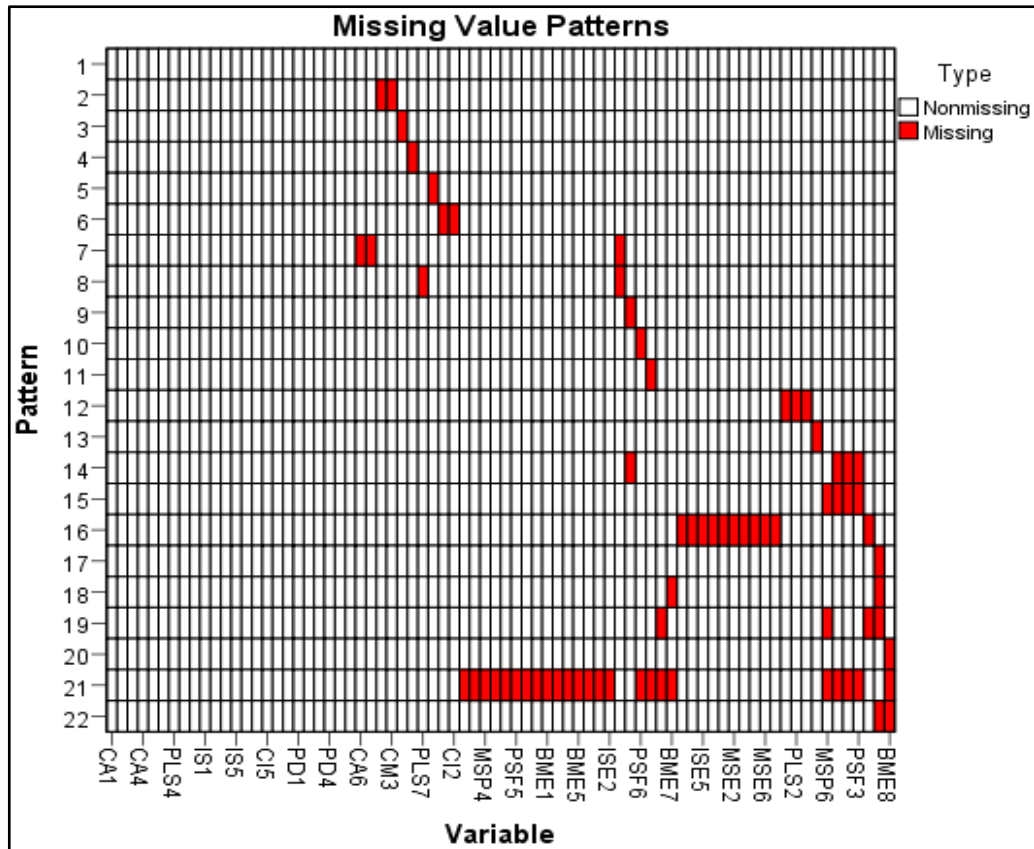
collected dataset are visually represented in Figures 3.1-3.3, providing a clear illustration of the data gaps.



Source: Survey Data, 2023

Figure 3.1 Summary of All Missing Values

The summary of all missing values above shows that 52(68.42%) had incomplete data or missing values with 24(31.58%) having complete data. With respect to cases, out of 253 respondents, only 52(20.55%) had missing data while 201 (79.45%) were complete. The figures also show that 117 (0.608%) values had missing data while 19,111(99.39%) were complete. Generally, the figures above show that no case (respondent) was dropped because no case had missing data exceeding 15%. Hence, all the data was fit for analysis after replacement of what was missing. To determine how to treat missing data, missing data value pattern analysis was carried out (Figure 3.4). The missing value pattern chart revealed the distribution of the missing data from a more detailed view across the study variables.



Source: Survey Data, 2023

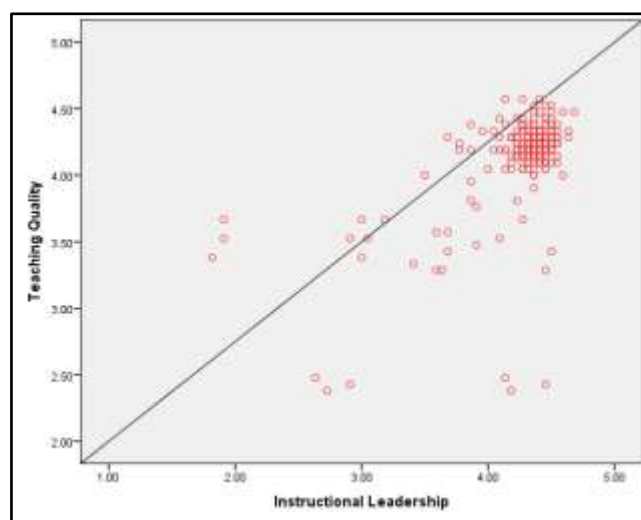
Figure 3.2 Missing Value Patterns

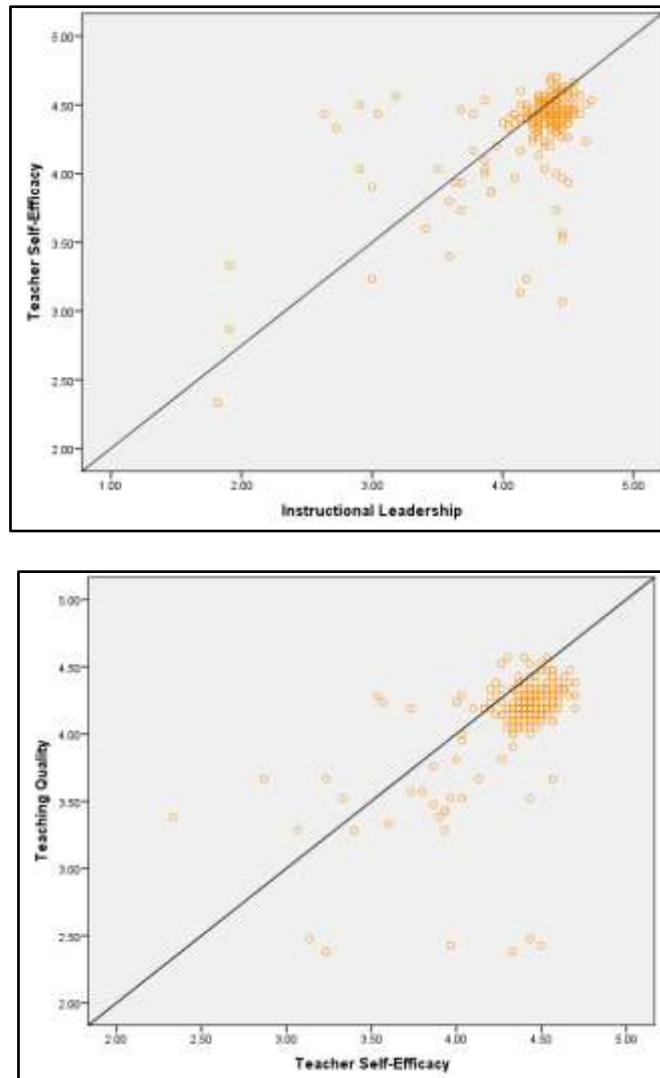
Figure 3.2 illustrates the data patterns, highlighting the incomplete data for various cases. Each pattern corresponds to a group of cases with missing values for a specific variable. Nonetheless, as the data pattern figure shows, data that was missing was randomly distributed. Thus, it was missing completely at random (MCAR). When missing data is MCAR, there is no correlation between the missingness of the data and any values observed. As a result, there is no systematic factor influencing the likelihood of certain data being missing more than others (Lee et al., 2023). The benefit of MCAR data is that it does not introduce bias during analysis. Hence, it does not compromise the statistical power.

The remaining data can be regarded as a simple random sample of the complete data set when it is MCAR. With such data, missing values can be

substituted, preventing the sample size from shrinking below the intended level, which could have resulted in biased parameter estimates, loss of information, and reduced statistical power (Papageorgiou et al., 2018). The missing data were replaced using series mean imputation, which assumes that the mean of a variable is the most appropriate estimate for any missing values. When data is missing at random (MCAR), this method imputes each missing value with the mean of the known values for that variable. This approach allowed the data to be used for further analysis, as it ensured that no bias was introduced.

3.10.3 Normality and Linearity: To ascertain whether data was appropriate for linear analysis, normality and linearity tests were carried out. The normality tests involved drawing a histogram for every construct and variables studied. The histograms displaying normality curves were presented in appropriate sections in chapter four. To evaluate the linear relationship between the independent and dependent variables, scatter plots were utilised to visually inspect the alignment of data points with line of best fit (β), thereby assessing the degree of linearity between the variables. The linearity graphs follow hereunder.





Source: Survey Data, 2023

Figure 3.3 Linearity Graphs

The linearity graphs (Figures 3.3) reveal that while some data points deviated from the regression line (β), the overall distribution of data exhibited a pronounced clustering around the β line, suggestive of a significant correlation. Consequently, the data was deemed suitable for linear analysis, ensuring the derivation of meaningful and reliable results. This affirmative finding enabled the application of linear analytical techniques to the independent and dependent variables, with the expectation of yielding valid and interpretable outcomes.

3.10.4 Collinearity: Collinearity is the tendency for the measures of the independent variables not to be independent. This suggests that when the collinearity condition exists, the independent variables cannot independently predict the dependent variable. To evaluate the presence of collinearity, the variance inflation factor (VIF) was employed as the diagnostic metric, given its widespread acceptance as a standard measure for assessing multicollinearity. The resulting VIF values, presented in Table 3.5, provided insight into the degree of intercorrelation among the predictor variables.

Table 3.5: Variance Inflation Factor Results

Measures	VIF
Classroom Management	1.756
Cognitive Activation	1.754
Personal Learning Support	1.006
Curriculum coordination	1.376
Instructional Supervision	1.269
Monitoring Student Progress	1.801
Professional Development	1.792
Behaviour Management	2.065
Instructional Strategies	1.470
Motivational Strategies	1.297
Personal Sense	1.876

Source: Survey Data, 2023

The results presented in Table 3.5 indicate that multicollinearity was not a concern, as the variance inflation factor (VIF) values for all variables exceeded the recommended threshold of 0.5 (Hair et al., 2021). This suggests that each independent variable maintained its unique predictive capability regarding the dependent variable, while the measures of the dependent variable also remained distinct from one another, thereby ensuring the stability and reliability of the regression model.

3.11 Data Analysis

A two-pronged approach was adopted for data analysis, encompassing both descriptive and inferential statistics. Descriptive analysis involved computing percentages, frequencies, means, and standard deviations using SPSS to provide an overview of the data. To examine the complex relationships between variables and test hypothesized causal linkages, structural equation modelling (SEM) was employed through Smart Partial Least Square (PLS) software. This enabled the assessment of latent and manifest variables, as well as their corresponding indicators, ultimately facilitating the derivation of generalizable results (Purwanto et al., 2021).

3.12 Research Ethical Considerations

To ensure the ethical integrity of the study, rigorous protocols were implemented to address key concerns, including informed consent, participant anonymity, privacy protection, confidentiality, risk-benefit equilibrium, and accurate reporting and dissemination of findings. Following a comprehensive explanation of the study's objectives, participants provided their voluntary, informed consent to participate, effectively entering into a contractual agreement with the researcher. Additionally, participants were assured of their anonymity, with guarantees that their personal identities would be concealed, and their responses would remain confidential, thereby safeguarding their privacy and maintaining the trust necessary for meaningful data collection. Data were not linked to the individuals providing them because they were reported in aggregate form. With respect to accurate reporting, honest reporting was ensured with results based on actual data collected. The researcher also considered beneficence to reduce the

risk of harming participants. There had also been dissemination of the findings through publication of the results in peer-reviewed journal.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter focuses on presenting, analysing, and interpreting the findings from the study on instructional leadership and teaching quality among academic staff, with self-efficacy as a mediator, in public universities in Uganda. The findings are introduced starting with the demographic profiles, followed by the results related to the dependent variable. The subsequent sections are structured to align with the study's objectives, exploring specific thematic intersections, including the interplay between instructional leadership and teaching quality, the influence of instructional leadership on academic staff self-efficacy, the relationship between academic staff self-efficacy and teaching practices, and ultimately, the mediated effect of teachers' self-efficacy on the relationship between instructional leadership and teaching quality.

4.1 Demographic Profiles

The demographic profiles analysed included a range of variables, encompassing participant gender, marital status, highest academic attainment, appointment type, university responsibilities, and teaching tenure at the current institution. These demographic factors served as a foundation for examining potential variations in teaching quality and teacher efficacy, with the findings presented in Table 4.1.

Table 4.1: Demographic Profiles of the Academic Staff

Variable	Categories	Frequency	Per cent
Gender	Male	149	58.9
	Female	104	41.1
	Total	253	100.0
Marital status	Single never married	22	8.7
	Single ever married	10	4.0
	Married	221	87.4
	Total	253	100.0
Highest academic qualification	Bachelor's Degree	9	3.6
	Master's Degree	88	34.8
	PhD	156	61.7
	Total	253	100.0
Academic Rank	Graduate Fellow	14	5.5
	Assistant Lecturer	72	28.5
	Lecturer	102	40.3
	Senior Lecturer	47	18.6
	Associate Lecturer	12	4.7
	Professor	6	2.4
	Total	253	100.0
Responsibility in the University	Administrator	34	13.4
	Non-Administrator	219	86.6
	Total	253	100.0
Duration of teaching in current university	1-2 Years	12	4.7
	3-4 Years	39	15.4
	5 Years and above	202	79.8
	Total	253	100.0

Source: Survey Data, 2023

The demographic breakdown presented in Table 4.1 reveals a slight majority of male academic staff (58.9%) participated in the study, outnumbering their female counterparts (41.1%). Notably, both groups had a substantial representation,

meeting the required threshold for variability testing. These findings provided a foundation for exploring possible differences in academic staff perceptions of teaching quality and their self-evaluated teaching effectiveness. A gender-diverse faculty can contribute to a wider variety of instructional approaches. Promoting gender-responsive teaching practices is likely to foster more inclusive and supportive learning environments that accommodate students from diverse backgrounds. Further, analysis of marital status revealed a predominantly married cohort (87.4%), with smaller proportions identifying as single and never married (8.7%) or single with prior marital experience (4.0%).

Creating a supportive environment for married staff by promoting a healthy work-life balance and implementing family-friendly policies can significantly enhance staff well-being and overall job satisfaction. When educators feel supported in managing both their professional and personal responsibilities, they are more likely to engage actively and remain focused in their teaching roles. This increased engagement not only boosts instructional quality but also positively influences student learning experiences and academic outcomes. The data on highest educational attainment showed a significant concentration of PhD holders (61.7%), followed by master's degree recipients (34.8%), and a smaller percentage of bachelor's degree holders (3.6%). The examination of academic ranks showed a clear hierarchy, with lecturers making up the largest group at 40.3%. This was followed by assistant lecturers at 28.5%, senior lecturers at 18.6%, graduate fellows at 5.5%, associate lecturers at 4.7%, and professors representing the smallest category at just 2.4%. Robust academic credentials typically reflect an individual's ability to deliver comprehensive and intellectually challenging content. Consequently, when educators already possess

strong subject matter expertise, professional development initiatives can strategically pivot toward strengthening their pedagogical competencies. This includes refining instructional techniques, integrating innovative and student-centered teaching approaches, and adopting technologies that enhance engagement and learning. By focusing on teaching effectiveness rather than content mastery, institutions can foster more dynamic and impactful classroom experiences. Furthermore, the examination of staff responsibilities showed a clear distinction, with the majority (86.6%) of non-academic staff holding non-administrative roles, while a smaller proportion (13.4%) occupied administrative positions.

The tenure analysis revealed that a significant majority (79.8%) of academic staff had served at the university for over five years, with smaller cohorts having taught for three to four years (15.4%) and one to two years (4.7%). Institutional experience often plays a key role in enhancing instructional quality and fostering student engagement. However, to remain effective and avoid professional stagnation, educators need to engage in continuous training and development. Seasoned faculty members can also act as mentors or instructional leaders, promoting a culture of lifelong learning and ongoing professional improvement within the academic community.

The demographic attributes outlined above were carefully examined to identify possible differences in how academic staff perceive teaching quality within the university environment. By analysing factors such as age, gender, academic rank, and years of experience, the study aimed to uncover patterns or disparities in perceptions that could influence instructional effectiveness. This exploration provides valuable insights into how diverse backgrounds and

professional experiences shape educators' views on teaching quality in higher education institutions.

4.2 Teaching Quality of Academic Staff

Teaching quality served as the dependent variable in the study, and was assessed based on cognitive activation, classroom management, and personal learning support. The results for each of these measures are presented below:

4.2.1 Cognitive activation: Cognitive activation, which was defined as the first measure of teaching quality, was examined using seven indicators. The findings were presented in frequencies, percentages, and means as shown in Table 4.2.

Table 4.2: Cognitive Activation

Cognitive Activation	SD	D	NS	A	SA	Mean
I assign tasks and pose questions that challenge my students to think critically.	0 0	12 (4.7%)	3 (1.2%)	172 (68.0%)	66 26.1	4.15
I occasionally encourage students to create their own questions and propose possible answers.	1 (0.4%)	10 (4.0%)	1 (0.4%)	124 (49.0%)	117 (46.2%)	4.37
I encourage students to keep reflective journals or learning logs, which serve as a catalyst for introspection, fostering a deeper understanding of their academic journey and promoting critical thinking.	0 0	10 (4.0%)	4 (1.6%)	141 (55.7%)	98 (38.7%)	4.29
In every lecture, I facilitate a reflective practice where students engage in a metacognitive exercise, individually and in collaborative groups, to revisit and build upon their existing knowledge foundations.	0 0	10 (4.0%)	1 (0.4%)	126 (49.8%)	116 (45.8%)	4.38
I implement participatory teaching methods to promote effective learning.	0 0	11 (4.3%)	3 (1.2%)	130 5(1.4%)	109 4(3.1%)	4.33
I inspire my students to expand their knowledge by utilising various resources, such as books, online research, peer discussions, and seminars.	4 (1.6%)	6 (2.4%)	6 (2.4%)	116 (45.8%)	121 (47.8%)	4.36
I encourage I motivate my students to share and present the knowledge they have acquired from different sources with their peers.	2 (0.8%)	8 (3.2%)	4 (1.6%)	122 (48.2%)	117 (46.2%)	4.36

Source: Survey Data, 2023

As presented in Table 4.2, the overwhelming majority of academic staff (94.1%) acknowledged that they consistently assigned tasks and questions that stimulated

critical thinking in students, as evidenced by a high mean score of 4.15, which closely aligns with the "agree" category. Furthermore, a significant proportion (95.2%) reported occasionally requiring students to formulate their own questions and propose potential answers., with a mean score of 4.37 corroborating this finding. Additionally, a substantial majority (94.4%) indicated that they encouraged students to keep reflective journals or learning logs, which serve as a catalyst for introspection, fostering a deeper understanding of their academic journey and promoting critical thinking as supported by a mean score of 4.29. These findings collectively suggest that academic staff actively promote critical thinking and reflective learning practices among students.

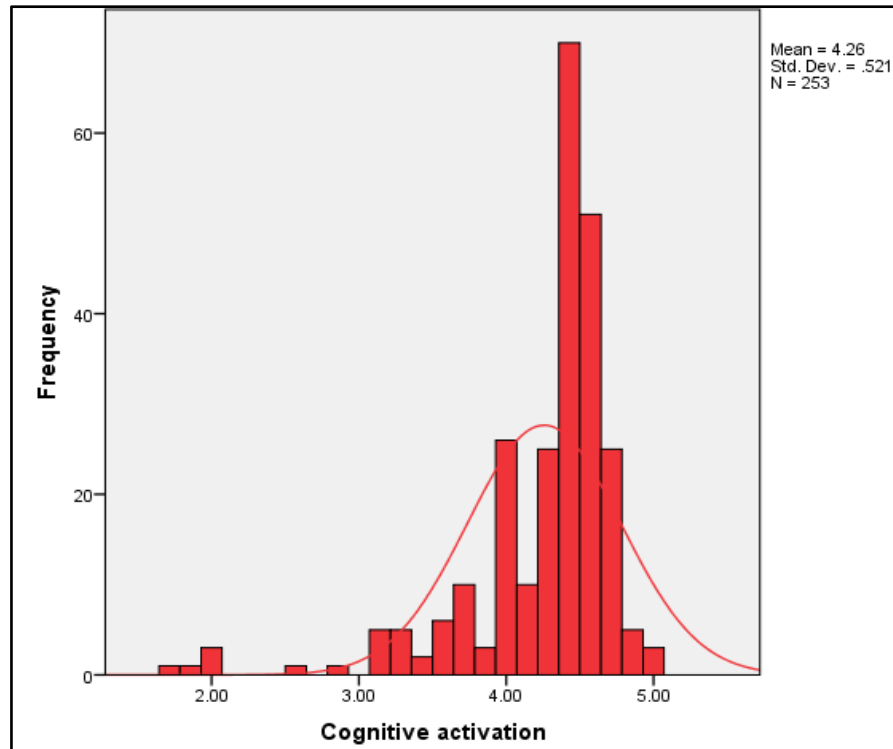
The academic staff indicated that they facilitated a reflective practice where students engaged in a metacognitive exercise, individually and in collaborative groups, to revisit and build upon their existing knowledge foundations (95.6%) with a high mean = 4.38. Therefore, in each lecture they taught, the academic staff engaged students to individually and in groups make reflections on prior knowledge. The academic staff also revealed that they used participatory teaching methods to ensure effective learning (94.5%) with a high mean = 4.23. The academic staff showed that they inspired students to expand their knowledge by utilising various resources, such as books, online research, peer discussions, and seminars (93.6%) where the high mean = 4.36 affirmed the finding. With respect to whether the academic staff encouraged students to share the knowledge they obtained with their peers; the majority agreed (94.4%) was affirmed by the high mean. An average index for the seven indicators measuring the construct was calculated show the academic staff's overall rating of cognitive activation. The summary Table 4.3 presents the results.

Table 4.3: Summary Table for Cognitive Activation

Descriptives			Statistic	Std. Error
Cognitive activation	Mean		4.26	0.03
	95% Confidence Interval for Mean	Lower Bound	4.19	
		Upper Bound	4.32	
	5% Trimmed Mean		4.32	
	Median		4.43	
	Variance		0.27	
	Std. Deviation		0.52	
	Minimum		1.71	
	Maximum		5.00	
	Range		3.29	
	Interquartile Range		0.57	
	Skewness		-2.33	0.15
	Kurtosis		7.05	0.31

Source: Survey Data, 2023

Table 4.3 shows a high overall mean (mean = 4.26) near the median (4.43) with a low standard deviation (Std = 0.52). This high mean indicates that academic staff perceived cognitive activation as being strongly enabled, and the proximity of the mean to the median suggests consistency in responses. The low standard deviation points to a relatively normal distribution of results, as Figure 4.1. visually represents it.



Source: Survey Data, 2023

Figure 4.1: Cognitive Activation

Figure 4.1 shows a high mean (4.26) as well as a low standard deviation (Std = 0.52). The high mean suggests that cognitive activation enhancement was perceived as strong, while the low standard deviation indicates a normal distribution of results, making them suitable for linear analysis.

4.2.2 Classroom Management: Classroom management, considered the second measure of teaching quality, was evaluated through seven indicators. Table 4. 4. shows the results, which include frequencies, percentages, and means.

Table 4.4: Classroom Management

Classroom Management	SD	D	NS	A	SA	Mean
I prepare my lectures and arrange instructional materials in advance	0	6	4	125	118	4.21
	0	(2.4%)	(1.6%)	(49.4%)	(46.6%)	
I make the most of lecture time by concentrating on my planned content	0	6	3	170	74	4.32
	0	(2.4%)	(1.2%)	(67.2%)	(29.2%)	
I establish clear expectations and routines for the class in collaboration with students.	0	6	1	146	100	4.50
	0	(2.4%)	(0.4%)	(57.7%)	39.5%)	
I take appropriate steps to restore order when students deviate from the established rules and routines	6	0	2	98	147	4.40
	(2.4%)	0	(0.8%)	(38.7%)	(58.1)	
I make every effort to minimise disruptions during lectures	6	9	2	125	120	4.40
	(2.4%)	0	(0.8%)	(49.4%)	(47.4%)	
I strive to foster an environment that supports and enhances student learning.	6	0	2	89	156	4.54
	(2.4%)	0	(0.8%)	(35.2%)	(61.7%)	

Source: Survey Data, 2023

As presented in Table 4.4, an overwhelming consensus emerged among academic staff regarding their preparatory practices, with a staggering 96.0% affirming that they consistently planned and organized instructional resources in advance, while a mere 2.4% expressed disagreement and 1.6% remained uncertain. The high mean = 4.21 close to code four for agreed suggested that the academic staff indicated that they planned their lectures and prepared their teaching and learning aids ahead of time. The majority (96.4%) indicated that they utilised their teaching

time effectively by focusing on their schemes of work, with those disagreeing being 2.4% and 1.2% not sure and the high mean = 4.32 confirmed the finding. The academic staff indicated that they set clear rules and routines for classes (97.2%) with the least 2.4% and 0.4% disagreeing and not sure respectively. The high mean = 4.50 affirmed the finding. Therefore, the academic staff indicated that they established clear guidelines and procedures for their classes.

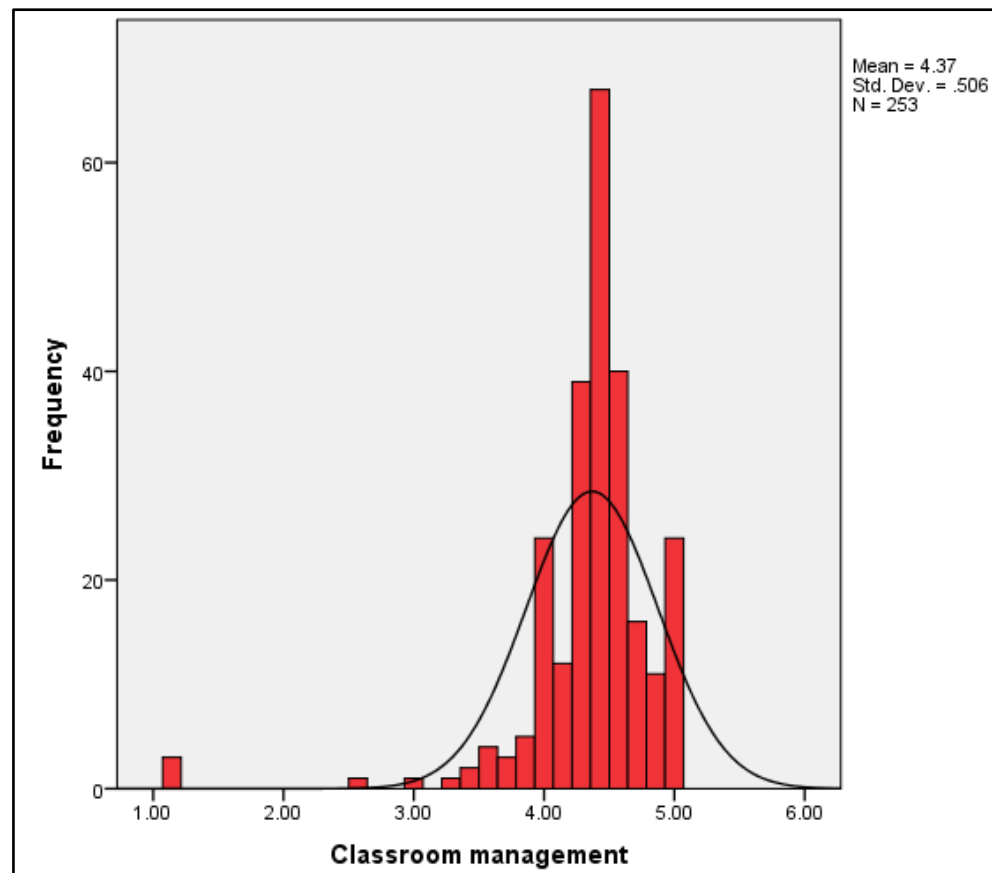
Furthermore, the academic staff indicated that they disciplined students who flouted the guidelines and procedures (96.8%) with a high mean = 4.40. Therefore, they indicated that they disciplined students who deviated from the established guidelines and procedures. The academic staff also revealed that they did whatever they could to ensure that lectures took place uninterrupted (96.9%) with a high mean = 4.40. They further indicated that they tried to provide the students with a favourable learning environment (96.8%) and the high mean = 4.54 affirmed the finding. To provide a comprehensive assessment of classroom management, a composite score was calculated by aggregating the results across seven key indicators. The consolidated findings are presented in Table 4.5, offering a concise overview of the academic staff's overall rating of classroom management effectiveness.

Table 4.5: Summary Table for Cognitive Activation

Classroom Management	Descriptives		Statistic	Std. Error
	Mean		4.37	0.03
	95% Confidence Interval for Mean	Lower Bound	4.31	
		Upper Bound	4.43	
	5% Trimmed Mean		4.42	
	Median		4.43	
	Variance		0.27	
	Std. Deviation		0.51	
	Minimum		1.14	
	Maximum		5.00	
	Range		3.86	
	Interquartile Range		0.29	
	Skewness		-3.35	0.15
	Kurtosis		18.6	0.31

Source: Survey Data, 2023

Table 4.5 indicates a high overall mean (mean = 4.37) close to the median = 4.43 with a low standard deviation (Std = 0.51). The high mean implied that the academic staff indicated that their classroom management was good and the mean being close to the median and a low standard deviation suggested that the results were normally distributed. Figure 4.2. diagrammatically displays the normal distribution curve.



Source: Survey Data, 2023

Figure 4.2: Classroom Management

The data presented in Figure 4.2 reveal a notably high mean score (4.37), coupled with a relatively low standard deviation (0.51). This combination suggests a robust demonstration of effective classroom management practices, while the narrow dispersion of scores indicates a homogenous distribution, rendering the data suitable for parametric analysis.

4.2.3 Personal Learning Support: Personal learning support, regarded as the third measure of teaching quality, was also assessed using seven indicators. The results, including frequencies, percentages, and means, are presented in Table 4.6.

Table 4.6: Personal Learning Support

Personal Learning Support	SD	D	NS	A	SA	Mean
I provide individual support to students whenever needed.	0 0	10 (4.0%)	6 (2.4%)	149 (58.9%)	88 (34.8%)	4.25
I tailor my lectures to address the specific needs of individual students	0 0	11 (4.3%)	2 (0.8%)	150 (59.3%)	90 (35.6%)	4.26
I promote and plan activities that foster self-regulated learning among students	0 0	10 (4.0%)	4 (1.6%)	128 (50.6%)	111 (43.9%)	4.34
I offer feedback on both individual and group assignments, as well as on in-class activities	2 (0.8 %)	8 (3.2%)	2 (0.8%)	160 (63.2%)	81 (32.0%)	4.23
I empower students to embark on cutting-edge projects that foster creativity and innovation, and provide a platform for them to showcase their work through peer-to-peer presentations, facilitating a dynamic and collaborative learning environment.	0 0	1 (0.4%)	2 (0.8%)	135 (53.4%)	115 (45.5%)	4.44
I welcome feedback from students on the quality of my lectures and respond to it with a positive attitude	0 0	10 (4.0%)	4 (1.6%)	137 (54.2%)	102 (40.3%)	4.31
I foster teamwork by assigning group projects and collaborative tasks	0 0	10 (4.0%)	3 (1.2%)	102 (40.3%)	138 (54.5%)	4.45

Source: Survey Data, 2023

As presented in Table 4.6, a decisive majority of academic staff (93.7%) affirmed their commitment to providing personalised support to students on an as-needed basis, underscoring their dedication to tailored guidance and mentorship. Conversely, a minority of 4.0% expressed disagreement, while 2.4% remained undecided. The high mean = 4.25 close to code four for agreed suggested that the academic staff offered students individual support when it was necessary. The majority (94.9%) indicated that in their lectures they took into consideration the needs of individual students with those disagreeing being 4.3 % and 0.8% not sure

and the high mean = 4.25 confirmed the finding. The academic staff further indicated that they urged students through proper planning to engage in self-regulated learning (91.5%) with the least 4.0% and 1.6% disagreeing and not sure respectively as the high mean = 4.34 affirmed the finding. Therefore, the academic staff indicated that they urged students through proper planning to do self-regulated learning.

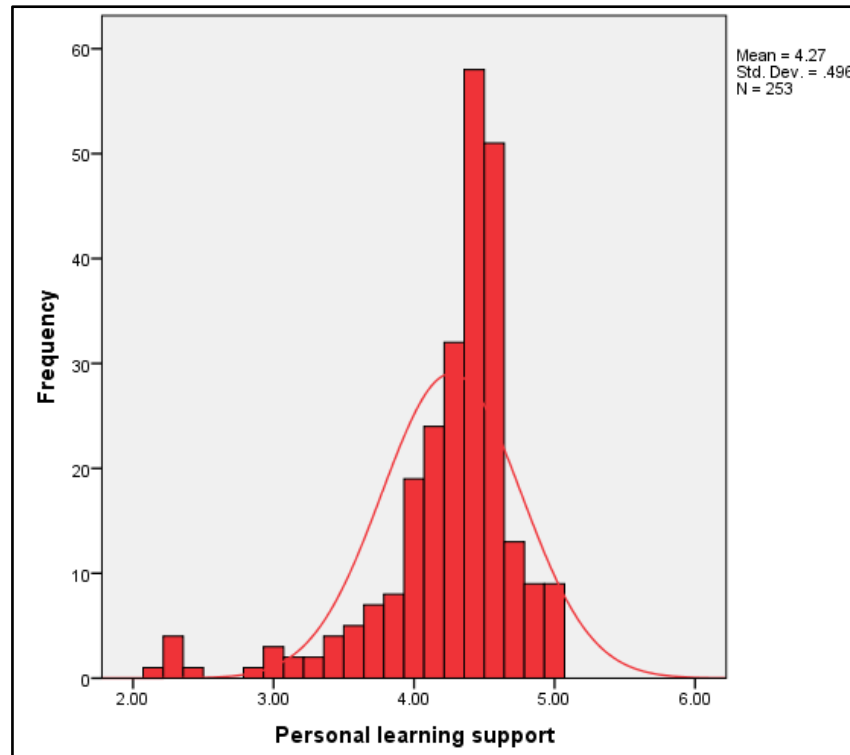
The academic staff also indicated that they gave feedback on individual and group activities to students during lectures (95.2%) with a high mean = 4.23. Therefore, the academic staff indicated that they gave feedback on individual and group activities to students during lectures. 4-Moreover, the academic staff revealed that they motivated students to embark on cutting-edge projects that foster creativity and innovation, and provide a platform for them to showcase their work through peer-to-peer presentations, facilitating a dynamic and collaborative learning environment and collaborative learning environment (98.9%) with a high mean = 4.44. The academic staff further indicated that they encouraged students assess their teaching and give feedback on the quality, which they took positively (94.5%) where the high mean = 4.31 affirmed that finding. With respect to whether the academic staff gave group assignments and projects to students to foster creativity, innovation and cooperation, the majority agreed (94.8%) and the high mean = 4.45 ascertained the finding. To provide a holistic assessment of personal learning support, a composite index was calculated by aggregating the scores across seven distinct indicators. This integrated approach yielded a comprehensive rating, which is succinctly presented in Table 4.7, offering a concise overview of the academic staff's overall provision of personal learning support.

Table 4.7: Summary Table for Personal Learning Support

Descriptives		Statistic	Std. Error
Personal learning support	Mean	4.27	0.03
	95% Lower Bound	4.21	
	Confidence Interval for Mean	4.33	
	5% Trimmed Mean	4.32	
	Median	4.43	
	Variance	0.25	
	Std. Deviation	0.50	
	Minimum	2.14	
	Maximum	5.00	
	Range	2.86	
	Interquartile Range	0.43	
	Skewness	-1.91	0.15
	Kurtosis	4.92	0.31

Source: Survey Data, 2023

Table 4.7 shows a high overall mean (4.27), which is close to the median (4.43), along with a low standard deviation (Std = 0.50). So, the high mean implied that the academic staff indicated that the personal learning support given to students was good and the mean being close to the median suggested that the results were normally distributed. The normally distribution is diagrammatically displayed in Figure 4.3.



Source: Survey Data, 2023

Figure 4.3: Personal Learning Support

Figure 4.3 shows a high mean (4.27) as well as a low standard deviation (Std = 0.496). The high mean indicated that their personal learning support was high while the low standard deviation suggested a normal distribution of the results, thus suitable for linear analysis.

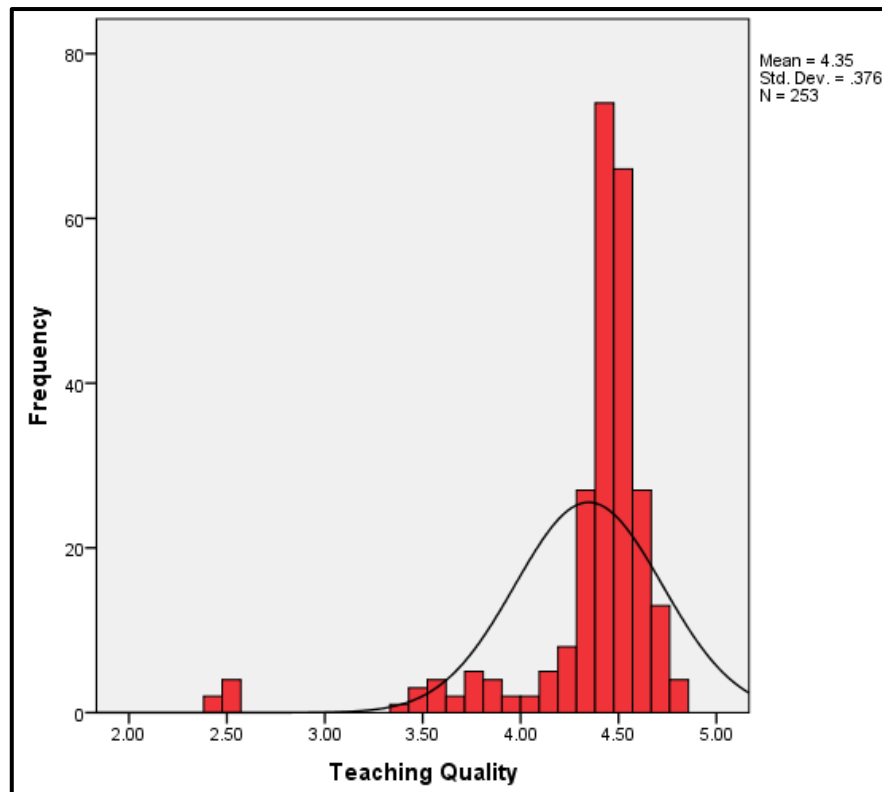
4.2.4 Teaching Quality Index: To determine how overall the academic staff rated the teaching quality, an overall index was calculated for the indicators of the three measures, namely cognitive activation, instructional strategies and personal learning support. Table 4.8 below, summarises the results on the indicators.

Table 4.8: Summary Table for Teaching Quality

Teaching Quality	Descriptives		Statistic	Std. Error
	Mean		4.35	0.02
	95% Confidence Interval for Mean	Lower Bound	4.09	
		Upper Bound	4.18	
	5% Trimmed Mean		4.18	
	Median		4.24	
	Variance		0.13	
	Std. Deviation		0.38	
	Minimum		2.38	
	Maximum		4.57	
	Range		2.19	
	Interquartile Range		0.14	
	Skewness		-3.11	0.15
	Kurtosis		11.4	0.31

Source: Survey Data, 2023

Table 4.8 indicates a high overall mean (mean = 4.35) almost equal to the median = 4.24 with a low standard deviation (Std = 0.38). The high mean implied that the academic staff indicated that their teaching quality was high and the mean being almost equal to the median and low standard deviation suggested that the results were normally distributed. Figure 4.4. diagrammatically displays normal distribution.

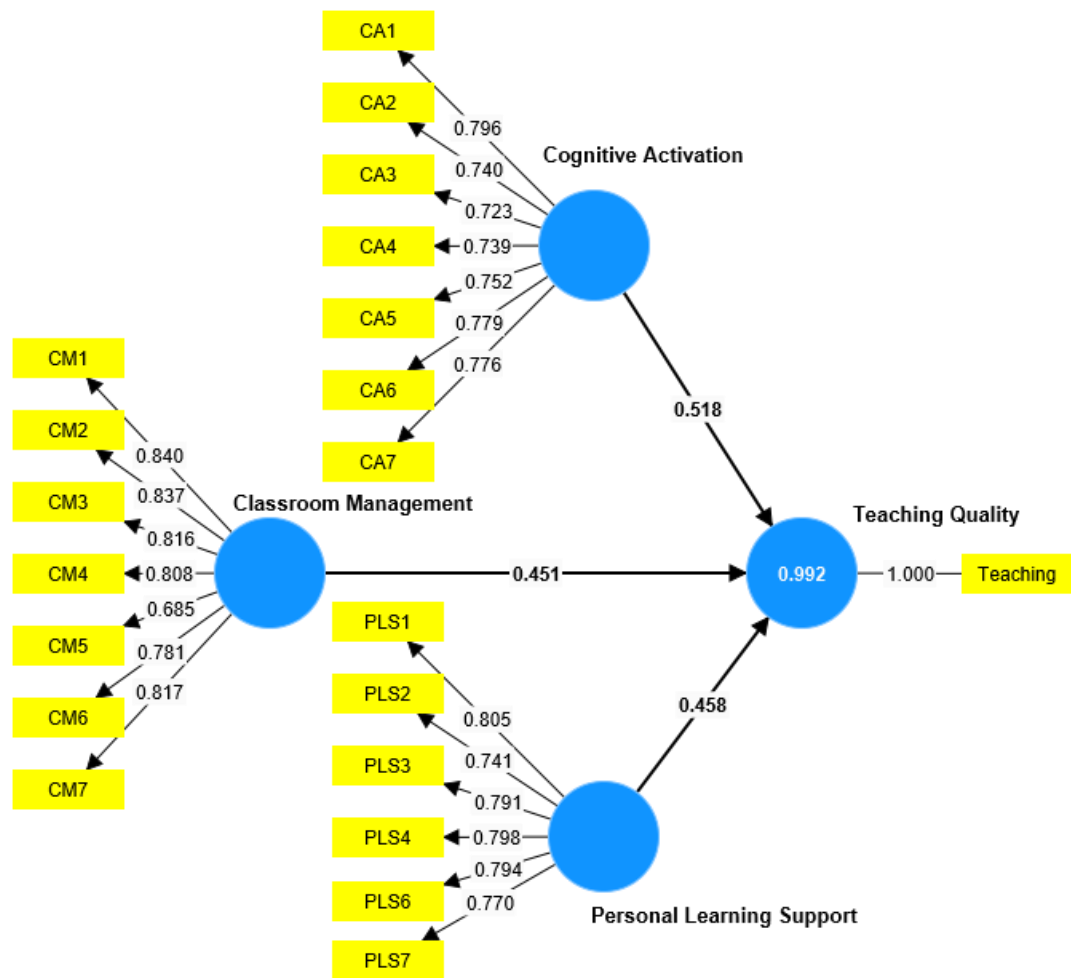


Source: Survey Data, 2023

Figure 4.4: Teaching Quality

Figure 4.4 reveals a high mean = 4.35 as well as a low standard deviation (Std = 0.38). The high mean indicated that their teaching quality was high while the low standard deviation suggested a normal distribution of the results, thus suitable for linear analysis.

4.2.5 Teaching Quality Structural Model: A structural equation model was developed to identify the measures of teaching quality and illustrate the indicators, as presented in Figure 4.5.



Source: Survey Data, 2023

Figure 4.5: Teaching Quality Structural Model

As depicted in Figure 4.5, teaching quality emerges as a complex, multifaceted construct, comprising three interconnected dimensions: cognitive activation, classroom management, and personal learning support, which collectively contribute to a rich and supportive learning environment. Factor loadings indicated that all indicators for cognitive activation and classroom management were retained. However, for personal learning support, indicator PLS 5 was excluded, resulting in six indicators being retained. Following a rigorous selection process, the retained indicators demonstrated robust factor loadings, surpassing the established cut-off criterion of 0.50 (Hair Jr. et al., 2021). This stringent threshold ensures that the retained indicators possess strong explanatory power, effectively

capturing the nuances of the constructs and collectively providing a comprehensive framework for understanding teaching quality.

4.3 Variations in Perceptions of Academic Staff about Teaching Quality and Self-Efficacy according to Background Characteristics

To investigate whether teaching quality and self-efficacy perceptions differed across various demographic backgrounds, a series of comparative analyses were undertaken using statistical techniques. Specifically, Student's t-Test was utilised to examine pairwise differences between means, whereas Analysis of Variance (ANOVA) was employed to compare means across three or more groups, enabling a nuanced exploration of the relationships between background factors and perceptual variations. First, the study tested differences in perception of teaching quality followed by self-efficacy. The results follow in Table 4.2 and 4.3.

4.3.1 Gender and Teaching Quality in the Universities: To investigate potential gender-based disparities in perceptions of teaching quality within the university setting, a comparative analysis was conducted using Student's t-Test. The results of this analysis are presented in Table 4.9, providing insights into the presence and extent of any gender-related differences.

Table 4.9: Student's t -Test Results for Gender and Teaching Quality in the Universities

Gender	Sample Size	Mean	STD	T	P
Male	149	4.12	0.37	0.565	0.391
Female	104	4.16	0.33		

Source: Survey Data, 2023

As shown in Table 4.9, female academic staff, on average, assigned slightly higher ratings to teaching quality (mean = 4.16) than their male counterparts (mean = 4.12). However, the Student's t-test revealed a non-significant difference between the genders with a p-value of 0.391, surpassing the conventional 0.05 significance threshold. This outcome suggests that the observed variation in teaching quality perceptions between male and female academic staff is likely due to chance, rather than a statistically significant difference.

4.3.2 Gender and Teaching Self-Efficacy: A comparative analysis using Student's t-Test was conducted to examine whether significant differences existed in academic staff's perceptions of their teaching self-efficacy. The results of this investigation are presented in Table 4.10, offering insights into potential disparities in self-efficacy perceptions among the academic staff.

Table 4.10: Student's t -Test Results for Gender and Teacher Self-Efficacy

Gender	Sample Size	Mean	STD	T	P
Male	149	4.19	4.34	0.679	0.500
Female	104	4.24	4.37		

Source: Survey Data, 2023

According to the results presented in Table 4.10, female academic staff reported marginally higher average ratings for their teaching self-efficacy (mean = 4.24)

compared to their male counterparts (mean = 4.34), although this difference was negligible. Statistical analysis revealed a t-value of 0.679 and a p-value of 0.500, which exceeded the conventional 0.05 significance threshold, indicating a lack of statistically significant difference between genders. Consequently, these findings suggest that gender is not a determining factor in shaping teaching self-efficacy among academic staff.

4.3.3 Marital Status and Teaching Quality: To establish whether there were differences in perception of teaching quality in the universities according to marital status and whether the teacher efficacy was different according to marital status, analyses of variance (ANOVA) were done; the findings are presented Table 4.11.

Table 4.11: ANOVA Results for Marital Status and Academic Achievement

Marital Status	Sample Size	Mean	STD		P
Single never married	22	4.11	0.45	1.95	0.145
Single ever married	10	3.92	0.64		
Married	221	4.15	0.32		

Source: Survey Data, 2023

The data presented in Table 4.11 reveal a nuanced pattern in the relationship between marital status and perceptions of teaching quality. Specifically, married academic staff reported the highest average ratings (mean = 4.15), followed by those who were previously married (mean = 3.92), and then those who were single and never married (mean = 3.41). However, the analysis of variance (ANOVA) results yielded a modest F-value of 1.95 and a p-value of 0.145, which exceeded the conventional 0.05 significance threshold. This outcome suggests that marital status does not exert a statistically significant influence on academic staff's perceptions of teaching quality in the university setting.

4.3.4 Marital Status and Teaching Self-Efficacy: To explore the potential interplay between marital status and teaching self-efficacy, a comprehensive analysis of variance (ANOVA) was performed. This investigation aimed to uncover whether significant differences in teacher efficacy existed across various marital status categories. The findings of this analysis are summarized in Table 4.12, providing insight into the relationship between marital status and teaching self-efficacy.

Table 4.12: ANOVA Results for Marital Status and Teacher Self-Efficacy

Marital Status	Sample Size	Mean	STD	F	P
Single never married	4.40	0.24	4.40	0.397	0.397
Single ever married	4.30	0.24	4.30		
Married	4.35	0.31	4.35		

Source: Survey Data, 2023

As shown in Table 4.12, the mean scores for teaching self-efficacy revealed a subtle variation across marital status categories, with single and never-married academic staff reporting the highest average rating (mean = 0.24), closely followed by their married counterparts (mean = 0.31), and then those who were single but previously married (mean = 0.24). However, the analysis of variance (ANOVA) yielded a low F-value of 0.397 and a p-value of 0.673, indicating a lack of statistical significance. This outcome implies that marital status has a negligible influence on teaching self-efficacy among academic staff.

4.3.5 Education Levels and teaching quality: To investigate whether academic staff's perceptions of teaching quality in universities varied as a function of their highest educational attainment, a comprehensive analysis of variance (ANOVA) was undertaken. The results of this investigation are presented in Table 4.13,

providing insight into the potential relationship between educational background and teaching quality perceptions.

Table 4.13: ANOVA Results for Highest Level of Education and Teaching Quality

Highest Level of Education	Sample Size	Mean	STD	F	P
Bachelor's Degree	9	4.26	0.10	0.827	0.438
Master's Degree	88	4.15	0.33		
PhD	156	4.12	0.37		

Source: Survey Data, 2023

The information in Table 4.13 highlights a complex relationship between the highest level of education attained by academic staff and their perceptions of teaching quality. Specifically, bachelor's degree holders reported the highest average ratings (mean = 4.26), followed closely by master's degree holders (mean = 4.15), and then PhD holders (mean = 4.12). However, the analysis of variance (ANOVA) results yielded a low F-value of 0.827 and a p-value of 0.438, exceeding the conventional 0.05 significance threshold. This outcome suggests that the level of education has a minimal impact on academic staff's perceptions of teaching quality, implying that opinions on teaching quality are not significantly influenced by educational attainment.

4.3.6 Education Levels and Teacher Self-Efficacy: To explore the potential relationship between academic staff's highest educational attainment and their perceptions of teaching quality, a statistical analysis of variance (ANOVA) was conducted. The outcomes of this investigation are summarized in Table 4.14, providing insight into whether significant differences in teaching quality perceptions exist across varying levels of educational achievement.

Table 4.14: ANOVA Results for Highest Level of Education and Teacher Self-Efficacy

Highest Level of Education	Sample Size	Mean	STD	F	P	LSD Post hoc test significantly different pairs (p = 0.05 level)
Bachelor's Degree	9	4.50	0.09	3.99	0.020	(Bachelor's Degree > PhD)
Master's Degree	88	4.41	0.18			
PhD	156	4.31	0.36			

Source: Survey Data, 2023

The results presented in Table 4.14 reveal a distinct pattern in the relationship between academic staff's highest educational attainment and their teaching self-efficacy. Notably, bachelor's degree holders reported the highest average ratings (mean = 4.50), closely followed by master's degree holders (mean = 4.41), and then PhD holders (mean = 4.31). The analysis of variance (ANOVA) yielded a relatively high F-value of 3.99, accompanied by a statistically significant p-value of 0.020. This significance was further elucidated by the Least Significant Differences (LSD) post hoc test, which revealed that bachelor's degree holders exhibited substantially higher teaching self-efficacy compared to their PhD-holding counterparts. These findings collectively suggest that teaching self-efficacy is indeed influenced by the level of educational attainment.

4.3.7 Academic Rank and Teaching Quality: To investigate the potential relationship between academic rank and perceptions of teaching quality, a comprehensive analysis of variance (ANOVA) was conducted. The findings of this analysis are presented in Table 4.15, offering insight into whether significant

differences in teaching quality perceptions exist across various academic ranks within the university setting.

Table 4.15: ANOVA Results for Academic Rank and Teaching Quality

Academic Rank	Sample Size	Mean	STD	F	P
Graduate	14	4.22	0.16	1.106	0.358
Fellow					
Assistant Lecturer	72	4.14	0.30		
Lecturer					
Lecturer	102	4.16	0.33		
Senior Lecturer	47	4.05	0.46		
Associate Professor	12	4.03	0.56		
Professor					
Professor	6	4.25	0.08		

Source: Survey Data, 2023

The data presented in Table 4.15 reveal a nuanced hierarchy in the relationship between academic rank and perceptions of teaching quality. Professors reported the highest average ratings (mean = 4.25), closely followed by graduate fellows (mean = 4.22), and then lecturers (mean = 4.16), assistant lecturers (mean = 4.14), senior lecturers (mean = 4.05, and associate professors (mean = 4.03), in descending order. However, the analysis of variance (ANOVA) results yielded a low F-value of 1.106 and a p-value of 0.358, exceeding the conventional 0.05 significance threshold. This outcome suggests that academic rank has a minimal impact on perceptions of teaching quality, implying that opinions on teaching quality are not significantly influenced by an individual's academic rank.

4.3.8 Level of Education and Teacher efficacy: To establish whether there were differences in perception of teacher efficacy according to academic rank, analyses of variance (ANOVA) were done; Table 4.16. evidenced the results.

Table 4.16 :ANOVA Results for Highest Level of Education and Teacher Self-Efficacy

Academic Rank	Sample Size	Mean	STD	F	P
Graduate Fellow	14	4.46	0.19	1.163	0.151
Assistant Lecturer	72	4.40	0.19		
Lecturer	102	4.34	0.34		
Senior Lecturer	47	4.28	0.37		
Associate Professor	12	4.28	0.32		
Professor	6	4.45	0.10		

Source: Survey Data, 2023

The data presented in Table 4.16 reveal a subtle differentiation in teaching self-efficacy across various academic ranks. Graduate fellows reported the highest average ratings (mean = 4.46), closely followed by professors (mean = 4.45), and then assistant lecturers, lecturers, and senior lecturers/associate professors, in a gradual decline. However, the analysis of variance (ANOVA) results yielded a relatively low F-value of 1.163, accompanied by a p-value of 0.151, which exceeded the conventional 0.05 significance threshold. This outcome implies that teaching self-efficacy does not significantly vary as a function of academic rank, suggesting a relatively homogeneous level of teaching self-efficacy across different academic positions.

4.3.9 Responsibility and Teaching Quality: To investigate potential disparities in perceptions of teaching quality within the university setting, based on the respondents' roles and responsibilities, a student's t-test analysis was performed. The findings of this analysis are presented in Table 4.17, providing insight into whether significant differences in teaching quality perceptions exist between academic staff with varying responsibilities.

Table 4.17: Student's t -Test Results for Responsibility and Teaching Quality in the Universities

Responsibility	Sample Size	Mean	STD	T	P
Administrator	34	4.19	0.24	1.484	0.195
Non-Administrator	219	4.12	0.37		

Source: Survey Data, 2023

The results presented in Table 4.17 indicate a subtle distinction in teaching quality perceptions between administrators and non-administrators. Administrators reported marginally higher average ratings (mean = 4.19) compared to their non-administrator counterparts (mean = 4.12). However, the student's t-test revealed a relatively low t-value of 1.484, accompanied by a non-significant p-value of 0.195. This outcome implies that administrative responsibilities have a negligible impact on perceptions of teaching quality, with only minor differences observed between the two groups.

4.3.10 Responsibility and Teaching Quality: To investigate whether administrative responsibilities in universities exert a significant influence on perceptions of teacher self-efficacy, a comparative analysis using a student's t-test was undertaken. The findings of this investigation are summarised in Table 4.18, shedding light on potential differences in teacher self-efficacy perceptions between administrators and non-administrators.

Table 4.18: Student's t -Test Results for Responsibility and Teacher Self-Efficacy

Responsibility	Sample Size	Mean	STD	T	P
Administrator	34	4.40	0.15	3.900	0.113
Non-Administrator	219	4.35	0.32		

Source: Survey Data, 2023

The data presented in Table 4.18 indicate that administrators exhibited slightly higher average teacher efficacy ratings (mean = 4.40) compared to non-administrators (mean = 4.35). Although administrators' mean scores surpassed those of non-administrators, the difference was relatively modest. The student's t-test yielded a t-value of 3.900, but the accompanying p-value of 0.113 exceeded the conventional 0.05 significance threshold, suggesting that the observed difference was not statistically significant. Consequently, the findings imply that teacher efficacy perceptions are largely invariant across administrative roles, with only minor variations evident.

4.3.11 University and Teaching Quality: To explore the potential relationship between teaching experience and perceptions of teacher efficacy, a comprehensive analysis of variance (ANOVA) was performed. The results of this investigation are presented in Table 4.19, providing insight into whether significant differences in teacher efficacy perceptions exist across varying levels of teaching experience.

Table 4.19: ANOVA Results for Duration Teaching in the University and Teaching Quality

Duration Teaching in the University	Sample Size	Mean	STD	F	P	LSD Post hoc test significantly different pairs (p = 0.05 level)
1-2 Years	12	3.87	0.72	4.047	0.019	(3-4 Years > 1-2 Years)
3-4 Years	39	4.20	0.14			
5 Years and above	202	4.14	0.35			

Source: Survey Data, 2023

The results presented in Table 4.19 reveal a notable variation in teacher efficacy perceptions across different levels of teaching experience. Specifically, academic staff with 3-4 years of experience reported the highest average ratings (mean = 4.20), followed closely by those with 5 or more years of experience (mean = 4.14), and then those with 1-2 years of experience (mean = 3.87). The analysis of variance yielded a statistically significant result, with a high F-value of 4.047 and a low p-value of 0.019 ($p < 0.05$), indicating that teacher efficacy perceptions differ significantly across varying levels of teaching experience. LSD post hoc test results suggested that those had worked for three to four years had a significantly higher level of perception of teaching quality than those who had worked for one two years. Therefore, there are variations in perceptions of teaching quality according to the number of working years.

4.3.12 University and Self Efficacy-Efficacy: To establish whether Self- efficacy was different in terms of experience, ANOVA were done; Table 4.20 below, shows the findings.

Table 4.20 ANOVA Results for Duration Teaching in the University and Teacher Self Efficacy

Duration Teaching in the University	Sample Size	Mean	STD	F	P	LSD Post hoc test significantly different pairs (p = 0.05 level)
1-2 Years	12	4.14	0.52	3.111	0.046	(3-4 Years > 1-2 Years)
3-4 Years	39	4.37	0.33			
5 Years and above	202	4.36	0.28			

Source: Survey Data, 2023

The results in Table 4.20 indicate that individuals with three to four years of experience in the university had the highest mean score (mean = 4.37), followed by those with five or more years of experience (mean = 4.36), and those with one to two years of experience (mean = 4.14). The observed F-value was 3.111, which was relatively high, and the p-value ($p = 0.046$, $p < 0.05$) showed statistical significance. This suggests that teacher self-efficacy varied significantly based on years of experience. The LSD post hoc test revealed that individuals with three to four years of experience had notably higher teacher self-efficacy than those with one to two years of experience. Thus, teaching self-efficacy is influenced by the number of years worked.

4.4 Instructional Leadership and Teaching Quality

The first objective of the study investigated the impact of instructional leadership on the teaching quality of academic staff in Uganda's public universities. Instructional leadership served as the independent variable in this examination. This construct was operationalized through four key dimensions: instructional supervision, curriculum coordination, professional development, and monitoring

student progress. The subsequent sections present the findings related to each of these instructional leadership components.

4.4.1 Instructional Supervision: Instructional supervision was examined as the first instructional leadership construct and was studied using six indicators. The results for instructional supervision are displayed in Table 4.21

Table 4.21: Instructional Supervision

Instructional Supervision	SD	D	NS	A	SA	Mean
My superiors in this university visit classes regularly to observe teaching and learning	6 (2.4%)	55 (21.4%)	102 (40.3%)	80 (31.6%)	10 (4.0%)	3.13
My superiors in this university provides constructive feedback after observing lectures' lessons		23 (9.1%)	74 (29.2%)	132 (52.2%)	24 (9.5%)	3.81
My superiors in the department/faculty/school/college sometimes conduct informal observations in classrooms		20 (7.9%)	46 (18.2%)	149 (58.9%)	38 (15.0%)	3.89
My superiors in this university frequently observe lectures teach and discuss strategies for improvement		24 (9.5%)	33 (13.0%)	143 (56.5%)	53 (20.9%)	3.90
Superiors in the department/faculty/school/college meet with academic staff about how to conduct effective teaching		14 (5.5%)	43 (17.0%)	141 (55.4%)	55 (21.4%)	3.94
My superiors in this university are actively involved in teaching quality development	4 (1.6%)	8 (3.2%)	39 (15.4%)	150 (59.3%)	52 (20.6%)	3.94

Source: Survey Data, 2023

The results presented in Table 4.21, pertaining to the frequency of university superiors' classroom visits to observe teaching and learning, reveal a mixed response. The majority (40.3%) of respondents expressed uncertainty, while 34.6% indicated agreement and 23.8% disagreement. The mean score of 3.13, which falls near the neutral "unsure" category, suggests that, overall, university

superiors' classroom visits were not a consistent occurrence, with respondents' perceptions leaning towards ambiguity rather than definitive affirmation or denial. The higher mean score of 3.13 indicates that academic staff generally agreed that superiors regularly visited classes for this purpose. The academic staff indicated that superiors in the universities provided constructive feedback after observing lectures' lessons (61.6%) with the least 29.2% not sure and 9.1% disagreeing. The high mean = 3.81 affirmed the finding. Therefore, academic staff indicated that superiors in the universities provided constructive feedback.

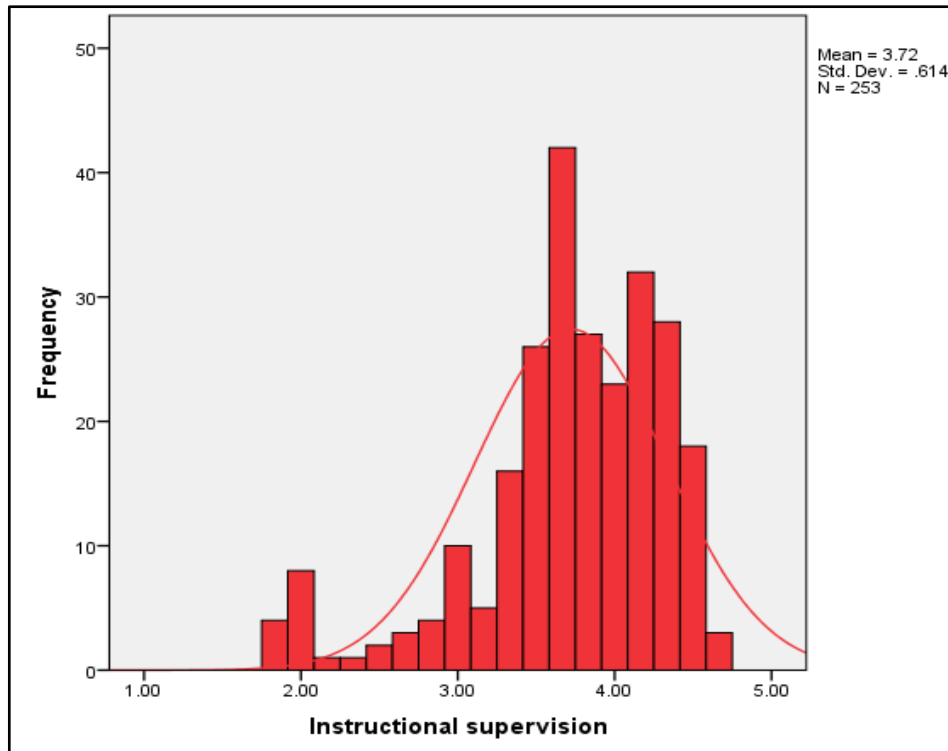
The academic staff indicated that superiors in the department/faculty/school/college sometimes conducted informal observations in classroom (73.9%) with a high mean = 3.89. Therefore, academic staff indicated that superiors in the department/faculty/ school/college sometimes conducted informal observations in classroom. The academic staff also revealed that superiors in this university frequently observed lectures teach and discuss strategies for improvement (56.5%) with a high mean = 3.90. The academic staff further indicated that superiors in the department/faculty/ school/college met with academic staff about how to conduct effective teaching 87.4%). The high mean = 3.9 affirmed the finding. With respect to whether superiors in this university were actively involved in teaching quality development, the majority agreed (76.8%). The high mean score of 3.94 provided further validation of the findings. To garner a comprehensive understanding of academic staff's perceptions regarding instructional supervision in universities, a composite score was calculated by averaging the six indicators assessing this construct. The detailed results of this analysis are summarised in Table 4.22, offering a nuanced insight into the overall rating of instructional supervision.

Table 4.22 Summary Table for Instructional Supervision

Descriptives			Statistic	Std. Error
Instructional supervision	Mean		3.72	0.04
	95% Confidence Interval for Mean	Lower Bound	3.65	
		Upper Bound	3.80	
	5% Trimmed Mean		3.77	
	Median		3.83	
	Variance		0.38	
	Std. Deviation		0.61	
	Minimum		1.83	
	Maximum		4.67	
	Range		2.83	
	Interquartile Range		0.67	
	Skewness		-1.20	0.15
	Kurtosis		1.53	0.31

Source: Survey Data, 2023

Table 4.22 indicate a high overall mean (mean = 3.72) close to the median = 3.83 with low standard deviation (Std = 0.61). The high mean implied that the academic staff indicated that instructional supervision was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. Figure 4.6. diagrammatically displays the normal distribution.



Source: Survey Data, 2023

Figure 4. 6:Instructional Supervision

Figure 4.6 reveals a high mean = 3.72 and low standard deviation (Std = 0.61).

The high mean indicated that their instructional supervision was high while the low standard deviation suggested a normal distribution of the results, thus fit for linear analysis.

4.4.2 Curriculum coordination: Curriculum coordination was examined as the second instructional leadership measure and was studied using six indicators.

Table 4.23 displays the findings.

Table 4.23: Curriculum coordination

Curriculum coordination	SD	D	NS	A	SA	Mean
University management encourages academic staff to plan so as to make curriculum effective		6 (2.4%)	7 (2.8%)	182 (71.9%)	58 (22.9%)	4.1 3
Management of the university has clearly designated those responsible for coordinating curriculum coordination across all departments	6 (2.4%)		3 (1.2%)	111 (43.9%)	133 (52.6%)	4.4 4
University management encourages academic staff to engage their students in innovative activities	6 (2.4%)		1 (0.4%)	191 (75.5%)	55 (21.4%)	4.1 4
Management of the university requests for reports from departments about curriculum coordination by academic staff	6 (2.4%)	1 (0.4%)	6 (2.4%)	146 (57.4%)	94 (37.2%)	4.2 7
Management has ensured that academic staff mark and provide grades of students in time		6 (2.4%)	3 (1.2%)	128 (50.6%)	116 (45.8%)	4.4 0
My supervisors at this university make sure that the university's academic goals are integrated into the shared objectives of the curriculum	6 (2.4%)	1 (0.4%)	2 (0.8%)	109 (43.1%)	135 (53.4%)	4.4 5
University management makes follow up to ensure that academic staff implement the curriculum the way the programme demands	6 (2.4%)		1 (0.4%)	157 (62.1%)	89 (35.2%)	4.1 3

Source: Survey Data, 2023

The findings presented in Table 4.23, regarding the extent to which university management fostered academic staff's curriculum planning to enhance cumulative effectiveness, revealed an overwhelmingly positive response. A substantial majority (94.8%) of respondents indicated that management encouraged such planning, while a negligible proportion expressed disagreement (2.4%) or uncertainty (2.8%). The high mean = 4.13 close to code four for agreed suggested that university management encouraged academic staff to plan so as to make curriculum effective. The majority percentage (96.5%) indicated that management of the universities had clearly designated those responsible for coordinating curriculum coordination across all departments with those disagreeing being 2.4% and 1.2% not sure. The high mean = 4.44 suggested that universities had clearly designated those responsible for coordinating curriculum coordination across all departments. The academic staff indicated that universities management encouraged academic staff to engage their students in innovative activities (96.9%) with 2.4% disagreeing and 0.4% not sure. The high mean = 4.14 affirmed the finding. Therefore, academic staff indicated that universities management encouraged academic staff to engage their students in innovative activities.

The academic staff indicated that management of the universities requested for reports from departments about curriculum coordination by academic staff (94.6%) with a high mean = 4.27. Therefore, academic staff indicated that management of the universities requested for reports from departments about curriculum coordination by academic staff. The academic staff also revealed that management has ensured that academic staff marked and provided grades of students in time (96.4%) with a high mean = 4.40. The

academic staff further indicated that superiors in the universities ensured that their academic goals are converted into common objectives of the curriculum (96.5%). The high mean = 4.45 affirmed the finding. With respect to whether university management made follow up to ensure that academic staff implemented the curriculum the way the programme demanded; the majority agreed (97.3%). The high mean = 4.13 ascertained the findings. To establish how, overall, the academic staff rated their curriculum coordination in the universities, an average mark of the seven indicators measuring the construct was computed. Table 4.24 presents the results.

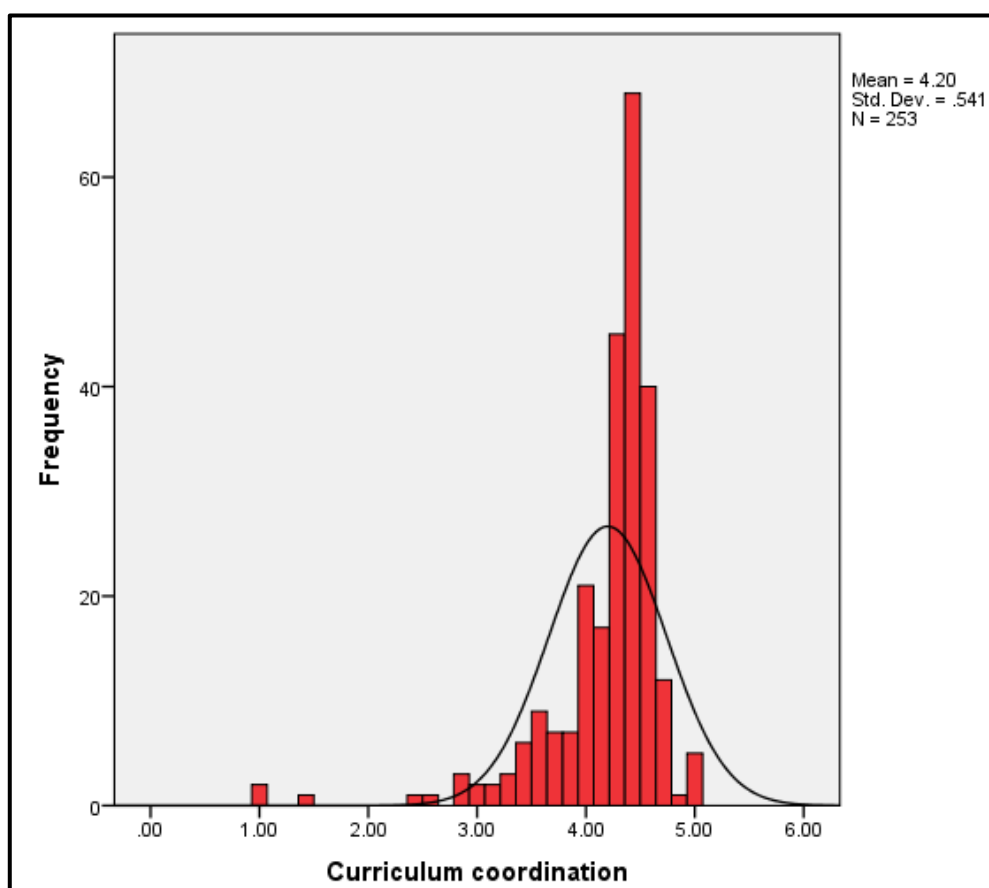
Table 4. 24: Summary Table for Curriculum coordination

Descriptives			Statistic	Std. Error
Curriculum coordination	Mean		4.20	0.03
	95%	Lower	4.13	
	Confidence	Bound		
	Interval for	Upper	4.27	
	Mean	Bound		
	5% Trimmed Mean		4.26	
	Median		4.29	
	Variance		0.29	
	Std. Deviation		0.54	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		0.43	
	Skewness		-2.81	0.15
	Kurtosis		11.8	0.31

Source: Survey Data, 2023

Table 4.24 indicates a high overall mean (mean = 4.20) close to the median = 4.29 with low standard deviation (Std = 0.54). The high mean implied that the

academic staff indicated that curriculum coordination was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. Figure 4.7 diagrammatically displays the normal distribution.



Source: Survey Data, 2023

Figure 4. 7: Curriculum coordination

Figure 4.7 reveals a high mean = 4.20 and low standard deviation (Std = 0.54).

The high mean indicated that their curriculum coordination was high while the low standard deviation indicated anormal distribution of results, therefore, they were acceptable for linear analysis.

4.4.3 Professional development: Professional development was examined as the third instructional leadership measure and was studied using seven indicators. The results for professional development are displayed in Table 4.25.

Table 4.25: Professional development

Professional development	SD	D	NS	A	SA	Mean
I have developed all the necessary skills to carry effective teaching	-	10 (4.0%)	1 (0.4%)	179 (70.8%)	63 (24.9%)	4.17
My superiors exhibit confidence in my development as a professional	-	10 (4.0%)	3 (1.2%)	116 (45.8%)	124 (49.0%)	4.40
Since I began working, I have experienced considerable professional growth.	-	10 (4.0%)	3 (1.2%)	136 (53.8%)	104 (41.1%)	4.32
As time has passed, my performance as a university teacher has significantly improved.	1 (0.4%)	9 (3.6%)	3 (1.2%)	118 (46.6%)	122 (48.2%)	4.39
My colleagues appreciate my professional growth	-	5 (2.0%)	2 (0.8%)	150 (59.3%)	96 (37.9%)	4.33
With my current knowledge, I am able to teacher satisfactorily	2 (0.8%)	9 (3.6%)	4 (1.6%)	118 (46.6%)	120 (47.4%)	4.36
I feel I have become a more competent as a professional university teacher	1 (0.4%)	9 (3.6%)	5 (2.0%)	126 (49.8%)	112 (44.3%)	4.34

Source: Survey Data, 2023

The findings in Table 4.25 on whether academic staff had developed all the necessary skills to carry out effective teaching cumulatively revealed a majority (95.7%) agreed, 4.0% disagreed while 0.4% were unsure. The high mean = 4.17 close to code four for agreed suggested that the academic staff had developed all

the necessary skills to carry out effective teaching. The majority percentage (94.8%) indicated that superiors exhibited confidence in development of academic staff as professionals with those disagreeing being 4.0% and 1.2% not sure. The high mean = 4.40 suggested that superiors exhibited confidence in development of academic staff as a professional. The academic staff indicated that they had significant professional development since they started working (94.9%) with 4.0% disagreeing and 1.2% not sure. The high mean = 4.32 affirmed the finding. Therefore, professional development academic staff since they started working was significant.

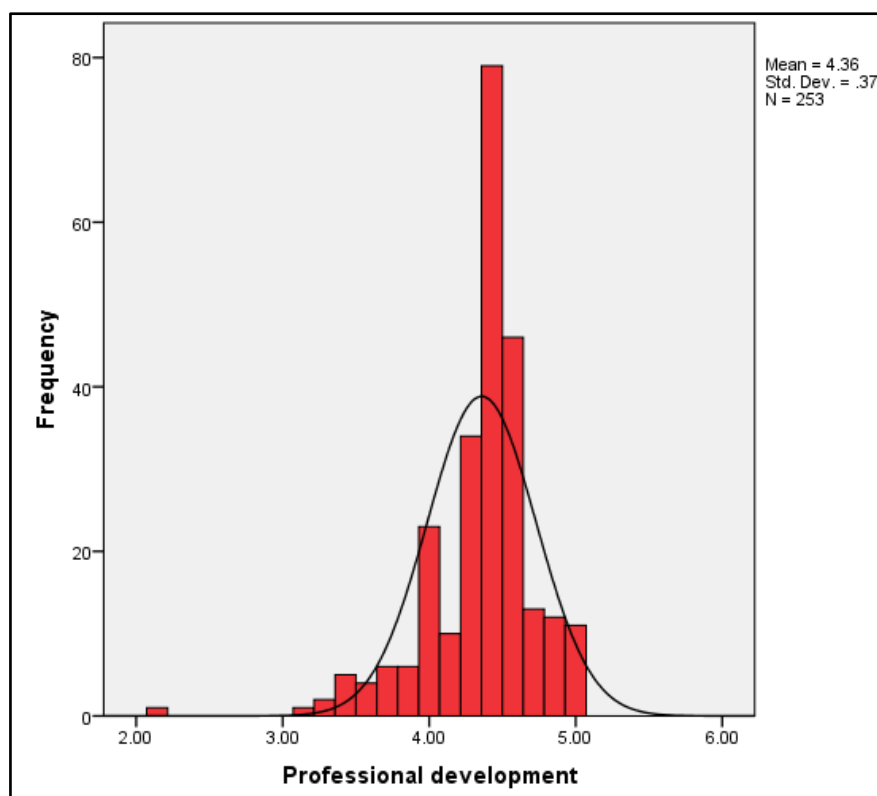
The academic staff indicated that over time academic staff performance had improved as professional university teachers (94.8%) with a high mean = 4.39. Therefore, academic staff indicated that that over time academic staff performance had improved as professional university teachers. The academic staff also revealed that they appreciated their professional growth (97.2%) with a high mean = 4.33. The academic staff further indicated that with current knowledge, they were able to teacher satisfactorily (94.0%). The high mean = 4.36 affirmed the finding. With respect to whether academic staff felt they had become more competent as professional university teachers, the majority agreed (94.1%). The high mean = 4.34 ascertained the finding. An average mark of the seven indicators assessing the construct was computed to determine the academic staff's overall rating of their professional development. Table 4.26 summarises the results.

Table 4.26: Summary Table for Professional Development

Descriptives			Statistic	Std. Error
Professional development	Mean		4.36	0.02
	95% Confidence Interval for Mean	Lower Bound	4.31	
		Upper Bound	4.40	
	5% Trimmed Mean		4.38	
	Median		4.43	
	Variance		0.14	
	Std. Deviation		0.37	
	Minimum		2.14	
	Maximum		5.00	
	Range		2.86	
	Interquartile Range		0.29	
	Skewness		-1.50	0.15
	Kurtosis		5.29	0.31

Source: Survey Data, 2023

Table 4.26 indicate a high overall mean (mean = 4.36) close to the median = 4.43 with low standard deviation (Std = 0.37). The high mean implied that the academic staff indicated that their professional development was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normal distribution is diagrammatically displayed in Figure 4.8.



Source: Survey Data, 2023

Figure 4.8 Professional Development

Figure 4.8 reveal a high mean = 4.36 and low standard deviation (Std = 0.37). The high mean indicated that their professional development was high while the low standard deviation suggested a normal distribution of the results, so they were suitable for a linear analysis.

4.4.4 Monitoring Student Progress: Monitoring student progress was examined as the fourth instructional leadership measure and was studied using six indicators. The results for student progress are displayed in Table 4.27.

Table 4.27: Student Progress Monitoring

Monitoring Student Progress	SD	D	NS	A	SA	Mean
Superiors in this university meet academic staff individually to discuss issues of students' progress	3 (1.2%)	6 (2.4%)	14 (5.5%)	173 (68.4%)	57 (22.5%)	4.09
Superiors in this university discuss students' results with academic staff which helps to strengthen curriculum coordination	3 (1.2%)	6 (2.4%)	13 (5.1%)	127 (50.2%)	104 (41.1%)	4.28
Superiors in this university suggest how to support students' progress	9 (3.6%)	6 (2.4%)	17 (6.4%)	126 (49.8%)	95 (37.5%)	4.15
Superiors in this university discuss results with academic staff to point out strengths and areas of improvement in instruction	3 (1.2%)	6 (2.4%)	11 (4.3%)	132 (52.2%)	101 (39.9%)	4.27
My superiors in this university identify students whose test results indicate a need for remediation or enrichment	4 (1.6%)	5 (2.0%)	7 (2.8%)	113 (44.4%)	124 (49.0%)	4.38
Management devises appropriate instructional programmes are devised for students whose test results indicate very low performance		3 (1.2%)	5 (2.0%)	142 (56.1%)	103 (40.4%)	4.36

Source: Survey Data, 2023

The findings in Table 4.27 on whether superiors in the universities met academic staff individually to discuss issues of students' progress cumulatively showed that the majority percentage (90.9%) agreed with 3.5% disagreeing while 5.5% was not sure. The high mean = 4.09 close to code four for agreed suggested that superiors in the universities met academic staff individually to discuss issues of students' progress. The majority percentage (91.3%) indicated that Superiors in the universities discussed students' results with academic staff which helped to strengthen curricula implementation with those disagreeing being 43.6% and 5.1% not sure. The high mean = 4.28 suggested that academic staff which helped to strengthen curricula implementation. The academic staff indicated that superiors in the universities suggested how to support students' progress (87.3%) with 6.0% disagreeing and 6.4% not sure. The high mean = 4.32 affirmed the finding. Therefore, superiors in the universities suggested how to support students' progress.

The academic staff indicated that superiors in the universities discussed results with academic staff to point out strengths and areas of improvement in instruction (92.1%) with a high mean = 4.27. Therefore, superiors in the universities discussed results with academic staff to point out strengths and areas of improvement in instruction. The academic staff also revealed that superiors in the universities identified students whose test results indicate a need for remediation or enrichment (93.4%) with a high mean = 4.38. The academic staff further indicated that management devised appropriate instructional programmes for students whose test results indicated very low performance (96.5%). The high mean = 4.36 affirmed the finding. To establish out how overall the academic staff rated monitoring students' progress in the universities, an average mark of the

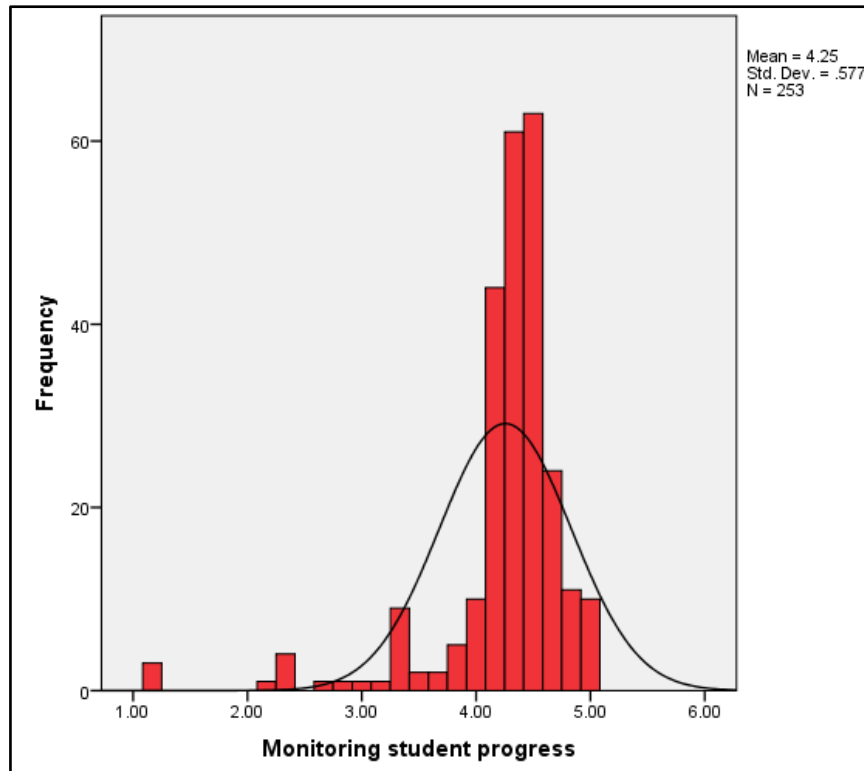
seven indicators assessing the construct was computed. Table 4.27 summarises the results.

Table 4.28: Summary Table for Monitoring Students' Progress

Descriptives			Statistic	Std. Error
Monitoring student progress	Mean		4.25	0.04
	95%	Lower	4.18	
	Confidence	Bound		
	Interval for	Upper	4.33	
	Mean	Bound		
	5% Trimmed Mean		4.33	
	Median		4.33	
	Variance		0.33	
	Std. Deviation		0.58	
	Minimum		1.17	
	Maximum		5.00	
	Range		3.83	
	Interquartile Range		0.33	
	Skewness		-2.83	0.15
	Kurtosis		10.8	0.31

Source: Survey Data, 2023

Table 4.28 shows a high overall mean (mean = 4.25), which is close to the median (4.33), with a low standard deviation (Std = 0.58). The elevated mean indicates that academic staff rated their monitoring of students' progress as high. Additionally, the proximity of the mean to the median and the low standard deviation suggest that the results follow a normal distribution. This normal distribution is visually represented in Figure 4.9.



Source: Survey Data, 2023

Figure 4. 8:Monitoring Students' Progress

Figure 4.9 reveals a high mean = 4.25 and low standard deviation (Std = 0.58).

The high mean indicated that their monitoring students' progress was high while the low standard deviation suggested a normal distribution of results, suitable for a linear analysis.

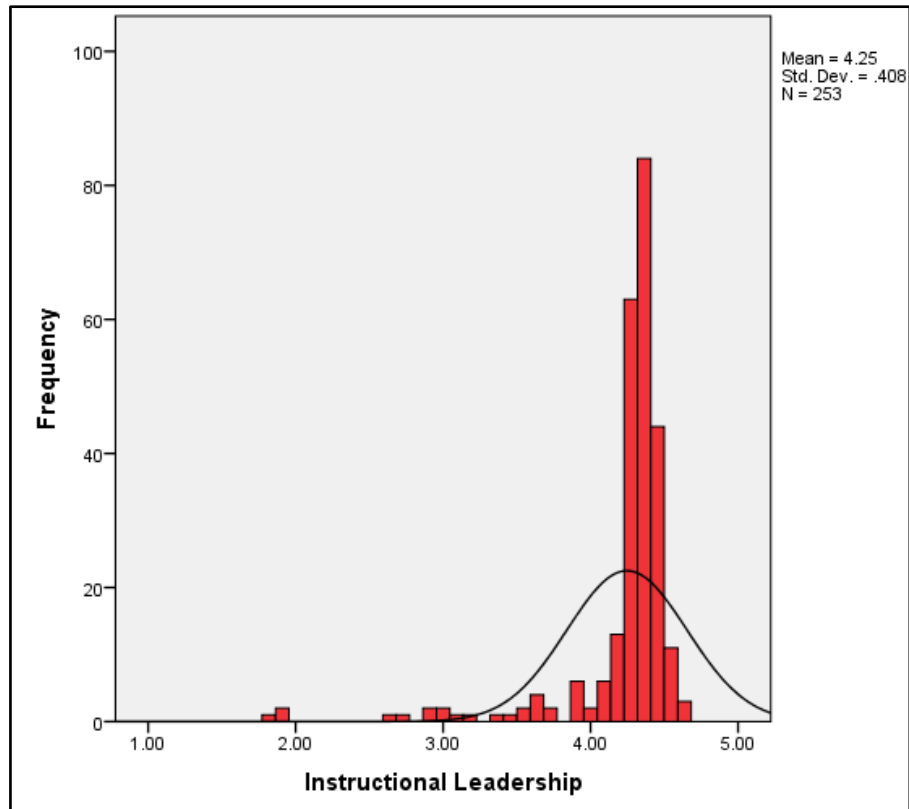
4.4.5 Instructional leadership Index: To determine how overall the academic staff rated instructional leadership, an overall index was calculated for the indicators of the four measures, namely instructional supervision, curriculum coordination, professional development and monitoring student progress. The results on the same follow in the summary table (Table 4.28) below.

Table 4.29 Summary Table for Instructional Leadership

Descriptives			Statistic	Std. Error
Instructional Leadership	Mean		4.25	0.026
	95% Confidence Interval for Mean	Lower Bound	4.20	
		Upper Bound	4.30	
	5% Trimmed Mean		4.31	
	Median		4.36	
	Variance		0.17	
	Std. Deviation		0.41	
	Minimum		1.82	
	Maximum		4.68	
	Range		2.86	
	Interquartile Range		0.14	
	Skewness		-3.59	0.15
	Kurtosis		15.1	0.31

Source: Survey Data, 2023

The data presented in Table 4.29 reveal a remarkably high overall mean score (mean = 4.25), closely aligned with the median value (median = 4.36). The accompanying standard deviation (Std = 0.41) is notably low, indicating a high degree of consistency in the responses. The convergence of the mean and median, coupled with the low standard deviation, suggests that the data follow a normal distribution. This distribution is visually illustrated in Figure 4.10, providing a graphical representation of the findings. Overall, the results imply that academic staff overwhelmingly perceived instructional leadership as being of high quality.



Source: Survey Data, 2023

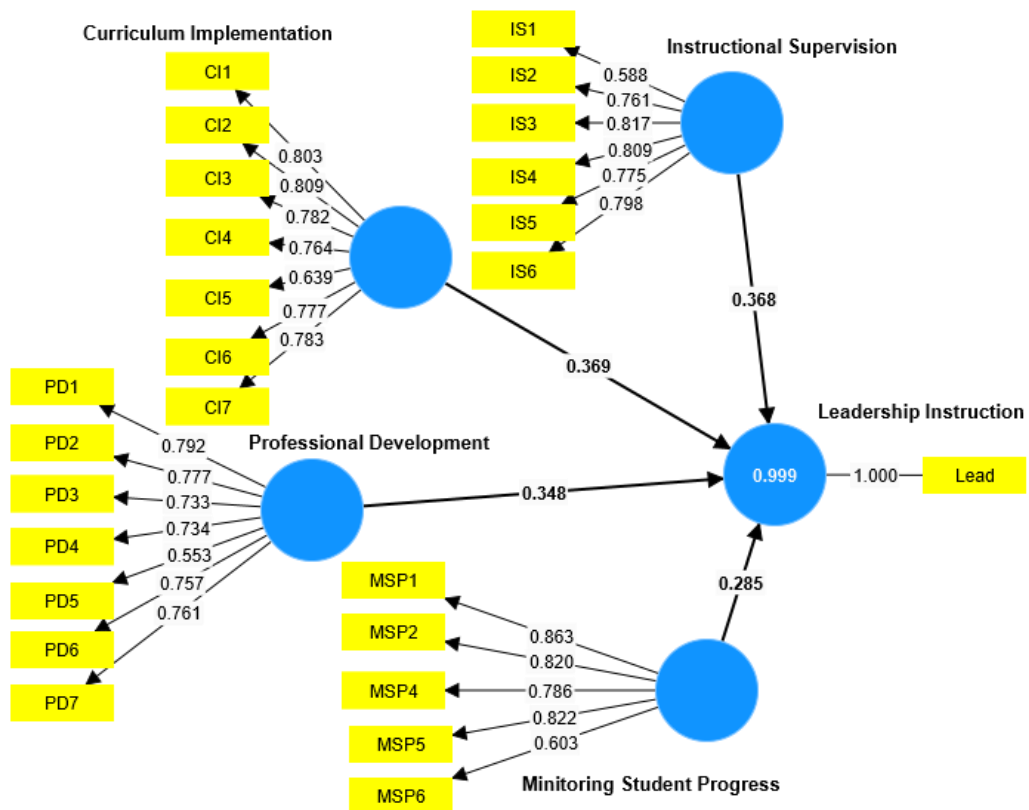
Figure 4. 9: Instructional Leadership

Figure 4.10 reveals a high mean = 4.25 and low standard deviation (Std = 0.41).

The high mean indicated instructional leadership in the universities was good while the low standard deviation suggested that the results were normally distributed thus suitable for a linear analysis.

4.4.6 Instructional Leadership Structural Model: To establish the measures of instructional leadership, a structural equation model was developed for the same.

Figure 4.11 shows the indicators measuring instructional leadership identified.



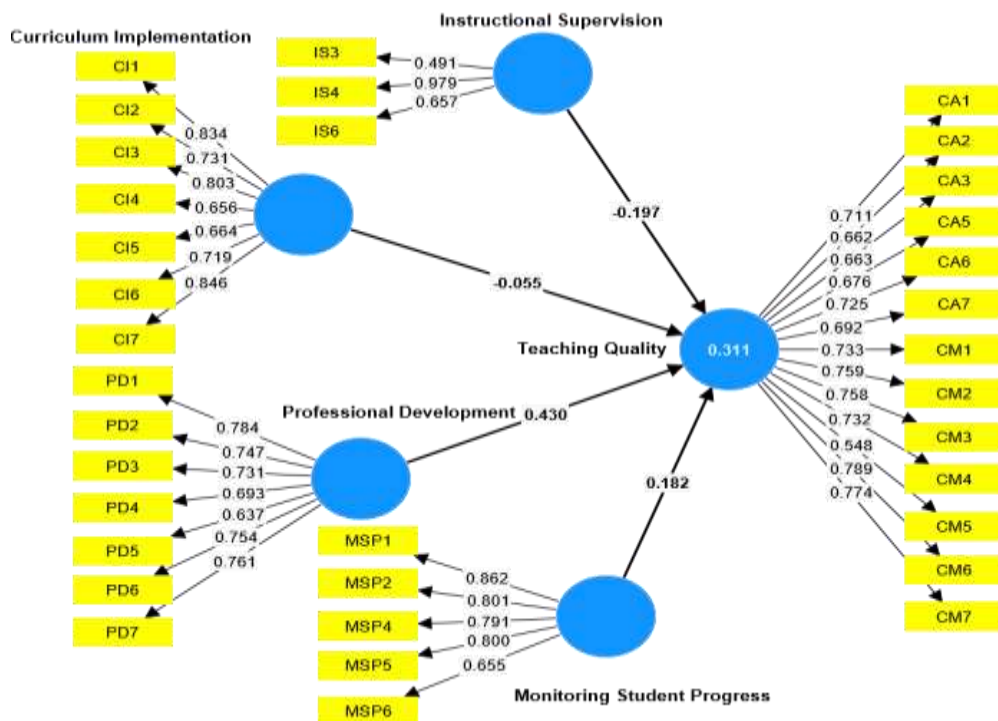
Source: Survey Data, 2023

Figure 4.10: Instructional Leadership Structural Model

The visualization presented in Figure 4.11 underscores the complex and multifaceted nature of instructional leadership, comprising four interconnected dimensions: targeted instructional supervision, deliberate curriculum coordination, on-going professional development, and vigilant monitoring of student progress. The factor loadings indicate that all the indicators were retained for each measure, with factor loadings exceeding 0.50, which is the minimum acceptable threshold. Thus, the indicators retained are actual measures of the constructs and three constructs explain instructional leadership.

4.4.7 Structural Model for Instructional Leadership and Teaching Quality

The study's inaugural hypothesis posited that instructional leadership exerts a profound impact on the teaching effectiveness of academic staff within public universities. To scrutinize this hypothesis, a structural equation model was devised, which subsequently gave rise to four subsidiary hypotheses. These subsidiary hypotheses contend that specific dimensions of instructional leadership – namely, instructional supervision, curriculum coordination, professional development, and student progress monitoring – each exert a significant influence on teaching quality. The structural equation model depicted in Figure 4.12 provides a visual representation of the causal relationships between instructional leadership and teaching quality, thereby facilitating a nuanced understanding of these complex dynamics.



Source: Survey Data, 2023

Figure 4.11: Instructional Leadership and Teaching Quality

The structural equation model (Figure 4.12) elucidates the intricate relationships between instructional leadership and teaching quality, with the latter comprising two distinct dimensions: cognitive activation and classroom management. Instructional leadership, in turn, is characterised by four key components: instructional supervision, curriculum coordination, professional development, and student progress monitoring. A comprehensive analysis of the model's results, as presented in Tables 4.15 and 4.29, yields valuable insights into the predictive power of instructional leadership on teaching quality. Specifically, the coefficients of determination (R² and adjusted R²) provide a quantitative assessment of this relationship. Furthermore, the examination of four subsidiary hypotheses reveals that each dimension of instructional leadership – instructional supervision, curriculum coordination, professional development, and student progress monitoring – exerts a significant influence on teaching quality, as evidenced by the structural equation estimates in Table 4.30.

Table 4.30: Instructional Leadership & Teaching Quality Path Model

	B	Mean	STD	P
Curriculum Coordination → Teaching Quality	-0.055	-0.021	0.105	0.599
Instructional Supervision → Teaching Quality	-0.197	-0.160	0.124	0.112
Monitoring Student Progress → Teaching Quality	0.182	0.177	0.123	0.140
Professional Development → Teaching Quality	0.430	0.436	0.083	0.000
R ² = 0.311				
R ² Adjusted = 0.300				

Source: Survey Data, 2023

The results from the structural equation modeling (Table 4) reveal that among the four dimensions of instructional leadership, only professional development demonstrated a statistically significant and positive effect on teaching quality ($\beta = 0.430$, $p = 0.000 < 0.05$). Although monitoring student progress showed a positive association ($\beta = 0.182$, $p = 0.140 < 0.05$), the effect was not statistically significant.

Conversely, both instructional supervision ($\beta = -0.197$, $p = 0.112 > 0.05$) and curriculum implementation ($\beta = -0.055$, $p = 0.599 > 0.05$) had negative and non-significant impacts on teaching quality. The coefficient of determination ($R^2 = 0.311$) indicates that these four instructional leadership factors collectively accounted for 31.1% of the variance in teaching quality among academic staff. The adjusted R^2 value (0.300) underscores that professional development alone was the significant contributor within the model. Consequently, focusing on professional development initiatives emerges as a strategic avenue for educational institutions seeking to enhance teaching quality.

4.5 Instructional Leadership and Teacher Self-Efficacy

The study's second objective focused on assessing the influence of instructional leadership on the teacher self-efficacy of academic staff in Uganda's public universities. In this framework, teacher self-efficacy was conceptualized as a mediating variable and treated as the outcome variable. Teacher self-efficacy was multidimensionally defined, encompassing four distinct domains: personal teaching efficacy, classroom behaviour management, instructional strategy implementation, and student motivation enhancement. The ensuing sections present the findings pertaining to each of these teacher self-efficacy dimensions.

4.5.1 Personal Sense Efficacy: The first component of teacher self-efficacy, personal sense of efficacy, was examined using nine indicators. The findings are presented in Table 4.31.

Table 4.31: Personal Sense of Efficacy

Personal Sense of Efficacy	SD	D	NS	A	SA	Mean
Students follow instructions during class.	0 0	12 (4.7%)	3 (1.2%)	162 (64.0%)	76 (30.0%)	4.19
I deliver academic content with a high level of competence	1 (0.4%)	10 (4.0%)	1 (0.4%)	132 (52.2%)	109 (43.1%)	4.34
I tailor the intricacy of my instructional approach to align with my students' comprehension levels, ensuring an optimal learning environment.	0 0	10 (4.0%)	3 (1.2%)	136 (53.8%)	104 (41.1%)	4.32
I foster a supportive and inclusive classroom environment where students feel empowered to express their thoughts, emotions, and perspectives freely and without reservation.	1 (0.4%)	9 (3.6%)	1 (0.4%)	135 (53.4%)	107 (42.3%)	4.34
I strive to be innovative in my lecture delivery methods.	0 0	6 (2.4%)	2 (0.8%)	137 (54.2%)	108 (42.7%)	4.37
I adopt a dynamic and adaptable approach to instruction, seamlessly adjusting my lecture delivery to accommodate diverse learning styles, unexpected discussions, and emerging student needs.	2 (0.8%)	8 (3.2%)	4 (1.6%)	122 (48.2%)	117 (46.2%)	4.36
I make an effort to be adaptive to new ways of delivering lectures	3 (1.2%)	8 (3.2%)	10 (4.0%)	122 (48.2%)	110 (43.5%)	4.30
I am skilled at identifying and addressing my students' problems before they escalate.	6 (2.4%)	3 (1.2%)	13 (5.1%)	135 (53.4%)	96 (37.9%)	4.23
I make a conscious effort to provide students with opportunities to openly share their thoughts and feelings during lessons.	4 (1.6%)	1 (0.4%)	5 (2.0%)	31 (51.8%)	112 (44.3%)	4.37

Source: Survey Data, 2023

A consensus emerged from the data presented in Table 4.31, where a substantial 94.0% of respondents expressed agreement with students complying with instructions in class, whereas a minority of 4.7% dissented and a negligible 1.2% remained undecided. The high mean = 4.19 close to code four for agreed suggested that students complied with instructions in class. The majority

percentage (95.3%) indicated that academic staff were able to deliver very competently with those disagreeing being 4.4 % and 0.4% not sure. The high mean = 4.34 suggested that academic staff were able to deliver very competently. A resounding affirmation emerged from the academic staff, with a staggering 94.9% confirming their ability to tailor teaching difficulty to students' comprehension levels, ensuring an optimal learning environment, as corroborated by a high mean score of 4.32. Conversely, a mere 4.0% expressed disagreement, while 1.2% remained ambivalent.

Furthermore, an overwhelming 95.8% of respondents asserted that they foster an open and inclusive classroom environment, where students are encouraged to express their thoughts and feelings freely, as reinforced by a high mean score of 4.34. This unequivocally suggests that academic staff actively promote student articulation of their views and opinions within the classroom setting. The academic staff further revealed they endeavoured to innovate new methods of delivering lectures (96.9%) with a high mean = 4.37. The academic staff further indicated that they were always flexible in the way they conducted lectures (94.4%). The high mean = 4.36 affirmed the finding. The academic staff reported that they endeavour to adapt to new lecture delivery ways (91.7%). The high mean = 4.30 ascertained the finding.

The academic staff indicated that they knew how to discern their students' challenges early enough, that is, before they escalated (91.3%). The high mean = 4.23 confirmed the finding. The academic staff intimated that they let their students freely voice their opinions and ideas as they taught (96.1%). The finding was further substantiated by a remarkably high mean score of 4.37. To garner a comprehensive understanding of the academic staff's overall self-perceived

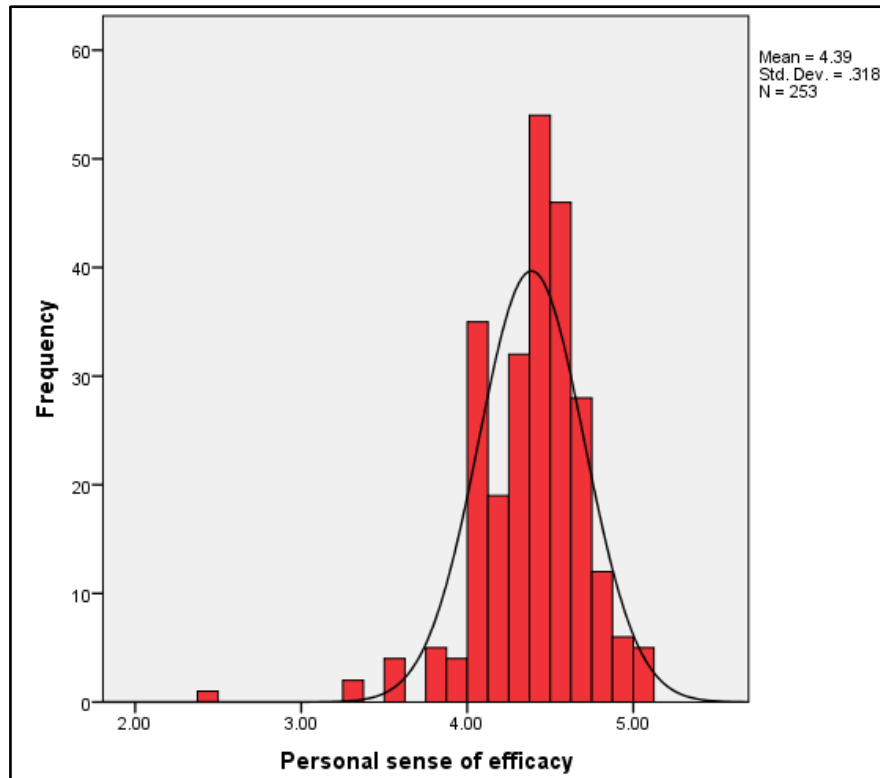
efficacy, a composite index was computed by aggregating the responses to the nine indicators that collectively operationalised this construct. The resultant findings are succinctly presented in Table 4.32.

Table 4.32: Summary Table for Personal Sense of Efficacy

Descriptives			Statistic	Std. Error
Personal sense of efficacy	Mean		4.39	0.02
	95%	Lower Bound	4.35	
	Confidence	Upper Bound	4.43	
	Interval for			
	Mean			
	5% Trimmed Mean		4.40	
	Median		4.44	
	Variance		0.10	
	Std. Deviation		0.32	
	Minimum		2.44	
	Maximum		5.00	
	Range		2.56	
	Interquartile Range		0.33	
	Skewness		-1.47	0.15
	Kurtosis		5.61	0.31

Source: Survey Data, 2023

Table 4.32 indicate a high overall mean (mean = 4.39) close to the median = 4.44 with low standard deviation (Std = 0.32). The high mean implied that the academic staff indicated that their personal sense of efficacy was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normally distribution is diagrammatically displayed in Figure 4.13.



Source: Survey Data, 2023

Figure 4.13: Personal sense of efficacy

Figure 4.13 reveal a high mean = 4.39 and low standard deviation (Std = 0.32).

The high mean indicated that their Personal sense of efficacy was high while the low standard deviation suggested the was a normal distribution of results, thus they were suitable for a linear analysis.

4.5.2 Behaviour Management Efficacy: Behaviour management efficacy the second element of teacher self-efficacy was studied using eight indicators. Table 33 presents the results.

Table 4.33: Behaviour Management Efficacy

Behaviour Management Efficacy	SD	D	NS	A	SA	Mean
I can quickly redirect a student who disrupts a lesson	- (1.2%)	3 (1.2%)	6 (2.4%)	181 (71.5%)	63 (24.9%)	4.19
I clearly communicate my expectations for appropriate behaviour to students	3 (1.2%)	- (1.2%)	4 (1.6%)	121 (47.8%)	125 (49.4%)	4.44
I can effectively manage any type of student with confidence	3 (1.2%)	- (1.2%)	1 (0.4%)	178 (70.4%)	71 (28.1%)	4.24
I am skilled at keeping defiant students engaged in my lessons	3 (1.2%)	1 (0.4%)	6 (2.4%)	140 (55.3%)	103 (40.7%)	4.34
I ensure that students consistently meet my expectations	- (1.2%)	3 (1.2%)	2 (0.8%)	125 (49.4%)	123 (48.6%)	4.45
I prevent disruptive students from interfering with class activities	3 (1.2%)	1 (0.4%)	2 (0.8%)	120 (47.4%)	127 (50.2%)	4.45
I can effectively refocus students if they stop working	3 (1.2%)	- (1.2%)	1 (0.4%)	153 (60.5%)	96 (37.9%)	4.34
I engage students' attention in large classes by varying my voice tone, using facial expressions, and adjusting my proximity to them.	3 (1.2%)	4 (1.6%)	12 (4.7%)	122 (48.2%)	112 (44.3%)	4.33

Source: Survey Data, 2023

The data presented in Table 4.33 reveals a decisive consensus, wherein a substantial 95.4% of respondents concurred that they possess the capability to swiftly refocus students in the event of lesson interruptions, while a marginal 1.2% expressed dissent and a negligible 2.4% remained uncertain. The high mean = 4.19 close to code four for agreed suggested that if students interrupted lessons

the academic staff would be able to redirect them quickly. The majority percentage (97.2%) of academic staff indicated that they allowed students to know that they anticipate proper conduct from them with those disagreeing being 4.4 % and 0.4% not sure. The high mean = 4.34 suggested that they let students know that they expect appropriate behaviour. The academic staff indicated they ably handled any kind of student with ease (98.5%) with 1.2% disagreeing and 0.4% not sure. The finding was robustly reinforced by a mean score of 4.32, indicating a strong affirmation. Consequently, it can be inferred with confidence that the academic staff possessed a keen understanding of how to calibrate instructional complexity to harmonise with the diverse cognitive abilities of their students.

As to whether academic staff were able to keep insolent students engaged in their lessons, the majority percentage (96.0%) agreed with a high mean = 4.34. Therefore, academic staff were able to keep insolent students engaged in their lessons. The academic staff also revealed that they ensured that students adhered to my expectations (98.0%) with a high mean = 4.45. The academic staff further indicated that they were always able to stop troublesome students from disrupting class programmes (97.6%). The high mean = 4.45 affirmed the finding. The academic staff reported that if students stopped working, they could put them back on track (98.4%). The high mean = 4.34 ascertained the finding. A significant proportion of academic staff (92.5%) reported effectively engaging students' attention through strategic nonverbal cues, including vocal inflections, facial expressions, and deliberate proximity, even in expansive classroom settings. This assertion was substantiated by a notably high mean score of 4.33. To derive a comprehensive assessment of the academic staff's behaviour management

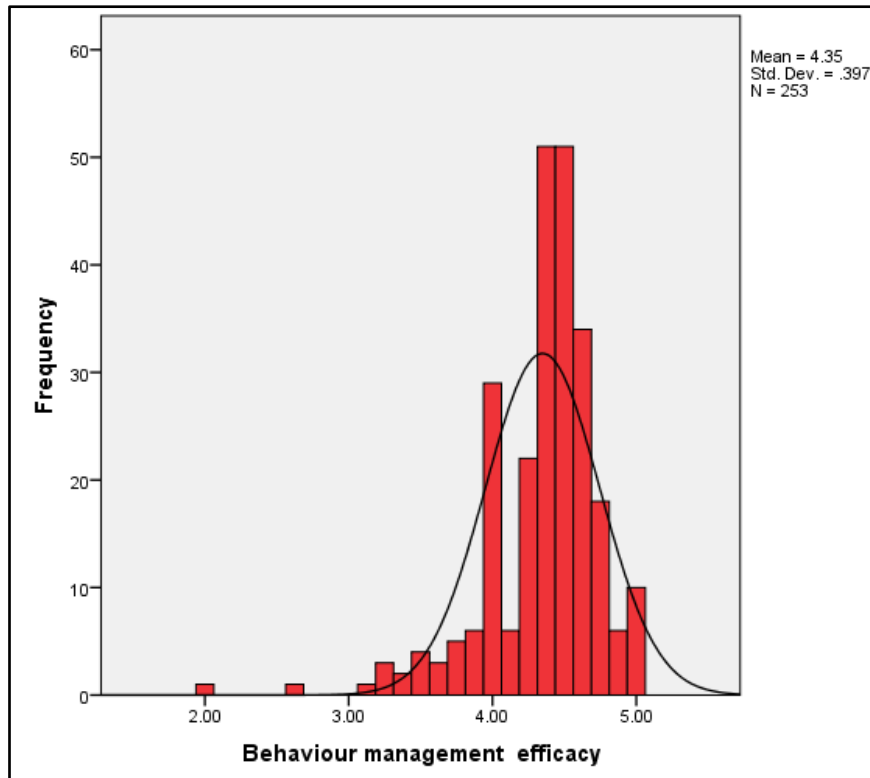
efficacy, a composite index was calculated by aggregating responses across eight pertinent indicators. A concise summary of the findings is presented in Table 4.34.

Table 4.34: Summary Table for Behaviour Management Efficacy

Descriptives			Statistic	Std. Error
Behaviour management efficacy	Mean		4.35	0.02
	95% Confidence Interval for Mean	Lower Bound	4.30	
		Upper Bound	4.40	
	5% Trimmed Mean		4.38	
	Median		4.38	
	Variance		0.16	
	Std. Deviation		0.40	
	Minimum		2.00	
	Maximum		5.00	
	Range		3.00	
	Interquartile Range		0.38	
	Skewness		-1.70	0.15
	Kurtosis		5.92	0.31

Source: Survey Data, 2023

Table 4.34 indicate a high overall mean (mean = 4.35) close to the median = 4.38 with low standard deviation (Std = 0.40). The high mean implied that the academic staff indicated that their behavioural management efficacy was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normally distribution is diagrammatically displayed in Figure 4.14.



Source: Survey Data, 2023

Figure 4.14: Behavioural Management Efficacy

Figure 4.14 reveal a high mean = 4.35 and low standard deviation (Std = 0.40).

The high mean indicated that their behavioural management efficacy was high while the low standard deviation suggested abnormal distribution of the results, thus they were fit for a linear analysis.

4.5.3 Instructional Strategies Efficacy: The third element of teacher self-efficacy, instructional strategies efficacy, was examined using six indicators, and the results follow in Table 35.

Table 4.35: Instructional Strategies Efficacy

Instructional Strategies Efficacy	SD	D	NS	A	SA	Mean
I assist students in connecting and building upon their prior knowledge to promote effective learning	0 0	5 (2.0%)	6 (2.4%)	158 (62.5%)	84 (33.2%)	4.27
I employ a differentiated questioning approach in class, utilizing a range of inquiry types to evaluate students' comprehension across various cognitive levels, from basic recall to higher-order thinking	0 0	6 (2.4%)	2 (0.8%)	145 (57.3%)	100 (39.5%)	4.34
I adopt a student-centric approach, meticulously adapting the curriculum to accommodate the diverse needs, abilities, and learning styles of each individual, thereby fostering a supportive and inclusive environment that cultivates academic success for all.	0 0	5 (2.0%)	4 (1.6%)	129 (51.0%)	115 (45.5)	4.40
Before teaching a skill, I analyse the task and determine the necessary steps to achieve my objectives	1 (0.4%)	4 (1.6%)	2 (0.8%)	147 (58.1%)	99 (39.1%)	4.34
To cultivate innovative thinking and self-expression, I empower students to showcase their learning through a range of multimodal presentations, embracing diverse formats such as visual displays, performances, and digital media, thereby celebrating creativity and individuality.	0 0	1 (0.4%)	2 (0.8%)	127 (50.2%)	123 (48.6%)	4.47
To facilitate deeper understanding and promote academic autonomy, I explicitly guide students in developing effective organizational strategies, providing transparent and structured instructions that enable them to navigate complex tasks, prioritise assignments, and manage their time efficiently.	0 0	5 (2.0%)	4 (1.6%)	136 (53.8%)	108 (42.7%)	4.37

Source: Survey Data, 2023

The findings in Table 4.35 on whether academic staff supported students to build on prior knowledge indicated that the majority percentage (97.5%) consented, with 2.0% dissenting while 2.4% were not sure. The high mean = 4.27 close to

code four for agreed suggested that academic staff supported students to build on prior knowledge. The academic staff indicated that employed a differentiated questioning approach in class, utilizing a range of inquiry types to evaluate students' comprehension across various cognitive levels, from basic recall to higher-order thinking (96.8%) with 2.4% disagreeing and 0.8% unsure. The robust mean score of 4.34 unequivocally substantiated the finding that academic staff employed a diverse range of questioning strategies to assess students' comprehension across multiple cognitive levels. Moreover, an overwhelming majority (96.5%) of staff reported adopting a student-centric approach, meticulously adapting the curriculum to accommodate the diverse needs, abilities, and learning styles of each individual, thereby fostering a supportive and inclusive environment that cultivates academic success for all, as reinforced by a notably high mean score of 4.40.

The academic staff further indicated that before teaching any skill, they analysed the task and determine the necessary steps to achieve my objectives, they analysed the task and determine the necessary steps to achieve my objectives (97.2%). The high mean = 4.34 affirmed the finding.

The academic staff reported that it enhanced students' creativity by allowing them to present their coursework in many ways (98.8%). The high mean = 4.47 ascertained the finding. An overwhelming majority (96.5%) of academic staff reported effectively leveraging nonverbal cues, including vocal nuances, facial expressions, and strategic proximity, to captivate students' attention, even in expansive classroom settings. This assertion was corroborated by a high mean score of 4.37. To provide a comprehensive snapshot of the academic staff's instructional efficacy, a composite index was calculated by aggregating responses

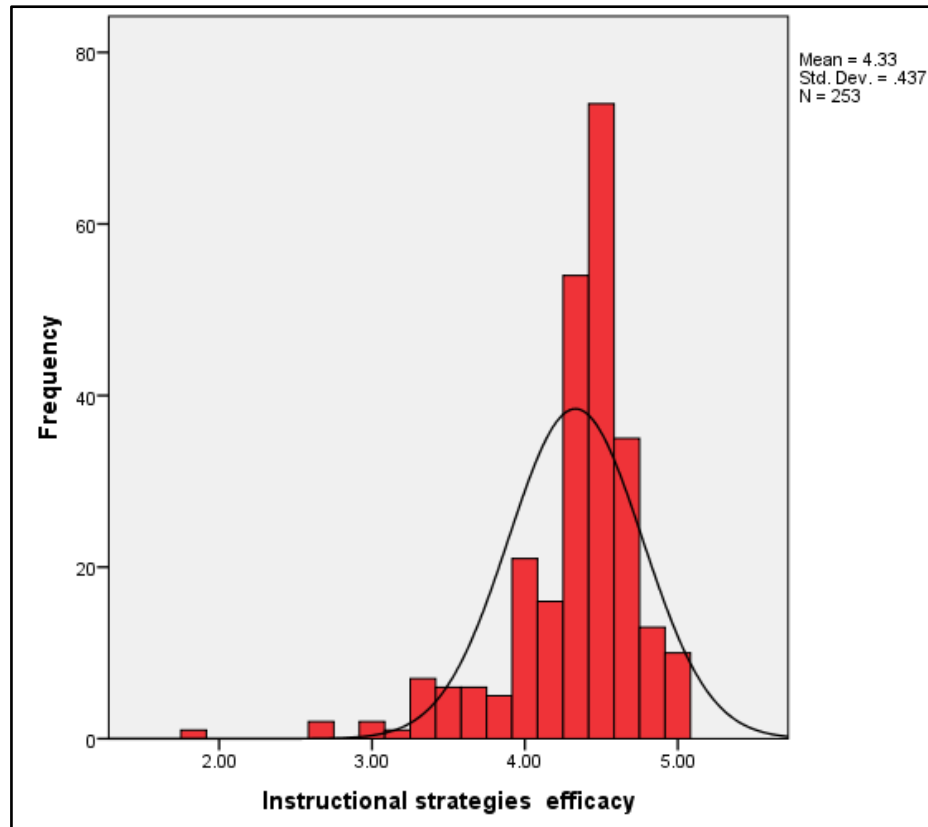
across six key indicators. The findings are succinctly summarized in Table 4.36, offering a distilled overview of the staff's pedagogical strategies.

Table 4.36: Summary Table for Instructional Strategies Efficacy

Descriptives			Statistic	Std. Error
Instructional strategies efficacy	Mean		4.33	0.03
	95% Confidence Interval for Mean	Lower Bound	4.28	
		Upper Bound	4.38	
	5% Trimmed Mean		4.37	
	Median		4.50	
	Variance		0.19	
	Std. Deviation		0.44	
	Minimum		1.83	
	Maximum		5.00	
	Range		3.17	
	Interquartile Range		0.33	
	Skewness		-1.83	0.15
	Kurtosis		5.53	0.31

Source: Survey Data, 2023

Table 4.36 indicate a high overall mean (mean = 4.33) close to the median = 4.50 with low standard deviation (Std = 0.44). The high mean implied that the academic staff indicated that their instructional strategies efficacy was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normally distribution is diagrammatically displayed in Figure 4.15.



Source: Survey Data, 2023

Figure 4.15: Instructional Strategies Efficacy

Figure 4.15 shows a high mean of 4.33 and a low standard deviation (Std = 0.44). The elevated mean suggests that the effectiveness of their instructional strategies was high, while the low standard deviation indicates that the results were normally distributed, making them appropriate for linear analysis.

4.5.4 Motivational Strategies Efficacy: The fourth element of teacher self-efficacy - motivational strategies efficacy, was examined using seven indicators. The summary of the results is in Table 37.

Table 4.37: Motivational Strategies Efficacy

Motivational Strategies	SD	D	NS	A	SA	Mean
Efficacy						
I have built strong rapport with my students and listen to them to demonstrate that I care	8 (3.2%)	1 (0.4%)		155 (61.3%)	89 (35.2%)	4.25
I make time to allow students to share their personal experiences with me, offering guidance when needed	9 (3.6%)		1 (0.4%)	112 (44.3%)	131 (51.8%)	4.41
I encourage my students to set goals and create action plans to guide their learning	7 (2.8%)	2 (0.8%)	1 (0.4%)	134 (53.0%)	109 (43.1%)	4.33
I consistently advise students to work diligently and achieve their goals within the set timelines	5 (2.0%)	2 (0.8%)	2 (0.8%)	99 (39.1%)	145 (57.3%)	4.49
I ensure that the assignments I give are manageable, helping to build students' confidence	4 (1.6%)	5 (2.0%)	1 (0.4%)	110 (43.5%)	133 (52.6%)	4.43
I engage students in collaborative learning to enhance their participation and enjoyment in the learning process	4 (1.6%)	2 (0.8%)	1 (0.4%)	108 (42.7%)	138 (54.5%)	4.48
I provide targeted positive reinforcement and feedback to motivate students	5 (2.0%)	4 (1.6%)	1 (0.4%)	107 (42.3%)	136 (53.8%)	4.44

Source: Survey Data, 2023

The data presented in Table 4.37 reveals a compelling consensus, with a resounding 96.5% of academic staff affirming that they fostered meaningful relationships with their students by establishing rapport and actively listening to their concerns, thereby demonstrating a genuine interest in their well-being. In contrast, a mere 3.2% expressed dissent, while a negligible 0.4% remained ambivalent. The high mean = 4.25 close to code four for agreed suggested that academic staff established rapport with their students and listened to them to show that they cared. The academic staff indicated they allowed their students to share their individual experiences with them for guidance (96.1%) with 3.6% disagreeing and 0.4% not sure. The high mean = 4.41 affirmed the finding. Therefore, academic staff allowed their students to share their individual experiences with them for guidance. As to whether academic staff encouraged their students to develop action plans for their learning based on their life goals, the majority percentage (96.1%) agreed with a high mean = 4.33. Therefore, academic staff encouraged their students to develop action plans for their learning based on their life goals.

The academic staff also revealed that they always counselled students to strive to achieve their goals through hard work and by adhering to set timelines (96.4%) with a high mean = 4.49. The academic staff further indicated that they gave students manageable assignments to build their confidence (96.1%). The high mean = 4.43 affirmed the finding. The academic staff reported that to create enjoyable learning experiences for students, they engaged them in collaborative learning (97.2%). The high mean = 4.48 ascertained the finding. The academic staff indicated that they motivated students by giving them targeted positive reinforcement and feedback (96.1%). The high mean = 4.44 confirmed the

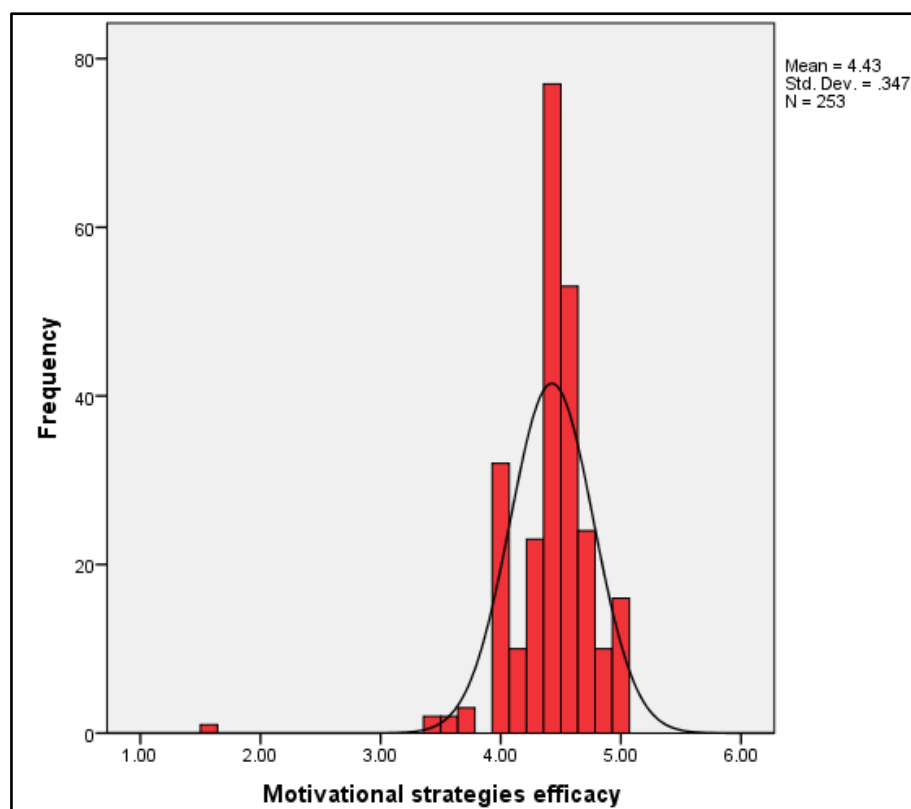
finding. To provide a comprehensive assessment of the academic staff's motivational strategies, a composite index was computed by aggregating responses across seven pivotal indicators. This integrated metric offers a nuanced evaluation of the staff's ability to inspire and motivate students. The detailed findings are presented in Table 4.38, providing a concise snapshot of the staff's motivational efficacy.

Table 4.38: Summary Table for Motivational Strategies Efficacy

Descriptives			Statistic	Std. Error
Motivational strategies efficacy	Mean		4.43	0.02
	95% Confidence Interval for Mean	Lower Bound	4.38	
		Upper Bound	4.47	
	5% Trimmed Mean		4.44	
	Median		4.43	
	Variance		0.12	
	Std. Deviation		0.35	
	Minimum		1.57	
	Maximum		5.00	
	Range		3.43	
	Interquartile Range		0.29	
	Skewness		-2.46	0.15
	Kurtosis		17.5	0.31

Source: Survey Data, 2023

Table 4.38 indicate a high overall mean (mean = 4.43) equal to the median = 4.43 with low standard deviation (Std = 0.35). The high mean implied that the academic staff indicated that their motivational strategies efficacy was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normal distribution is diagrammatically displayed in Figure 4.16.



Source: Survey Data, 2023

Figure 4.11: Motivational Strategies Efficacy

Figure 4.16 reveals a high mean = 4.43 and a low standard deviation (Std = 0.35).

The high mean indicated that their motivational strategies efficacy was high while the low standard deviation suggested a normal distribution of results, therefore, they were suitable for a linear analysis.

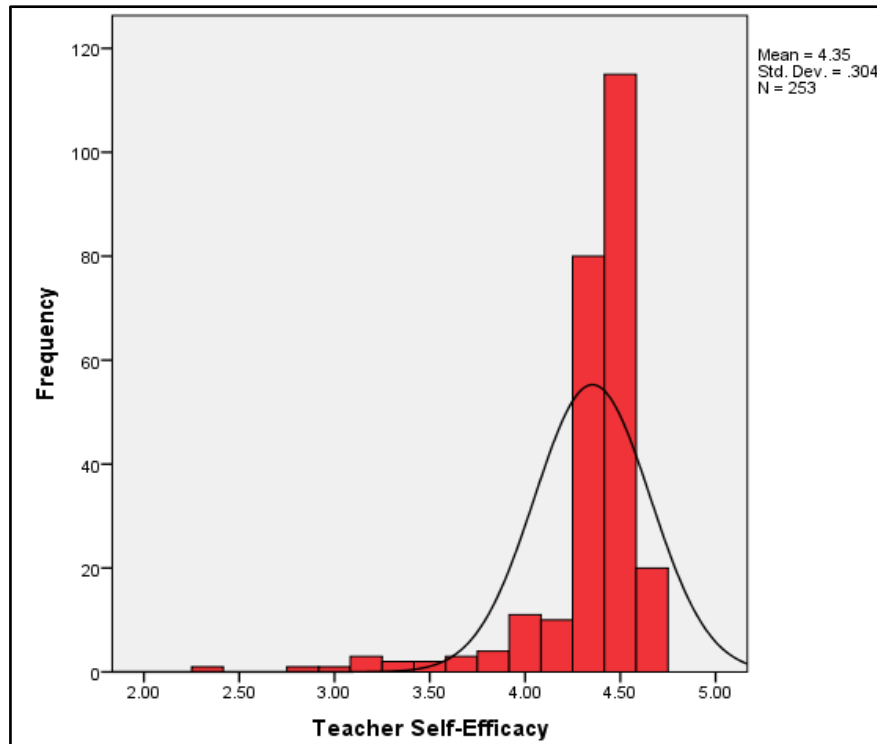
4.5.5 Teacher Self-Efficacy Index: To gauge the academic staff's collective perception of their teacher self-efficacy, a holistic index was computed, synthesizing responses across four critical domains: personal teaching efficacy, behaviour management, instructional strategies, and motivational approaches. This integrated metric provides a panoramic view of the staff's confidence in their teaching abilities. The comprehensive results are presented in the forthcoming summary table (Table 4.39).

Table 4.39 :Summary Table for Teacher Self-Efficacy

Descriptives			Statistic	Std. Error
Teacher	Mean		4.35	0.019
Self-	95%	Lower Bound	4.32	
Efficacy	Confidence	Upper Bound	4.39	
	Interval for			
	Mean			
	5% Trimmed Mean		4.40	
	Median		4.43	
	Variance		0.09	
	Std. Deviation		0.30	
	Minimum		2.33	
	Maximum		4.70	
	Range		2.37	
	Interquartile Range		0.17	
	Skewness		-3.19	0.15
	Kurtosis		12.9	0.31

Source: Survey Data, 2023

Table 4.39 indicate a high overall mean (mean = 4.35) close to the median = 4.43 with low standard deviation (Std = 0.30). The high mean implied that the academic staff indicated that their self-efficacy was high and the mean being close to the median and low standard deviation suggested that the results were normally distributed. The normally distribution is diagrammatically displayed in Figure 4.17.

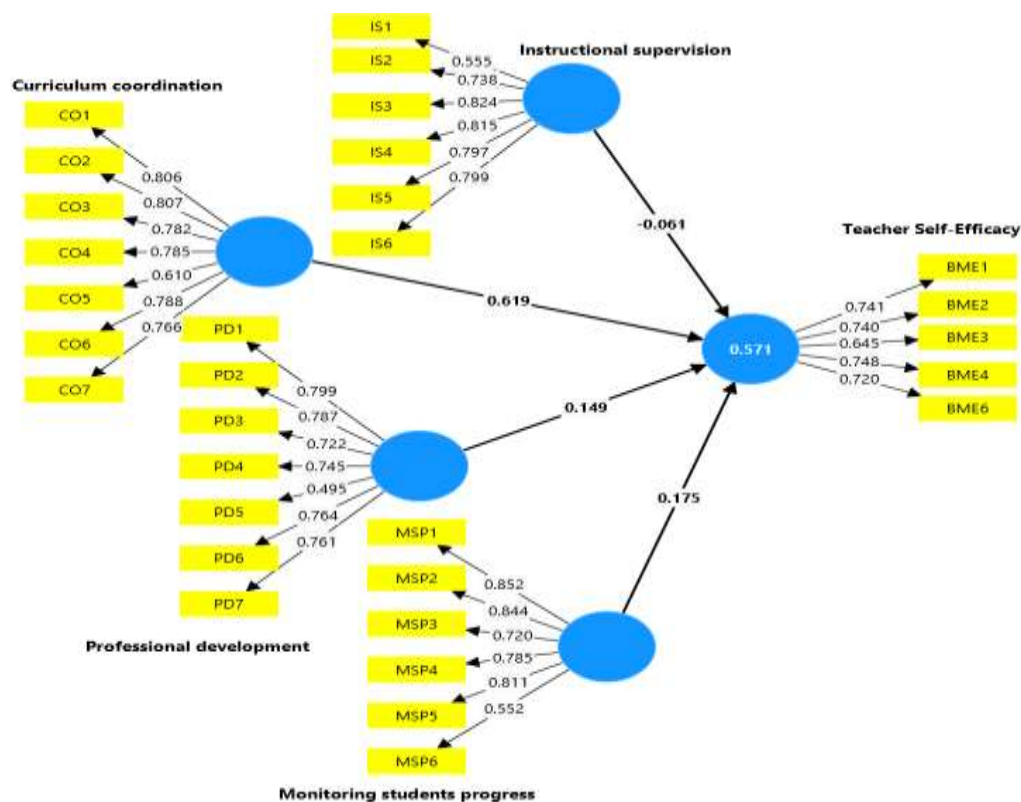


Source: Survey Data, 2023

Figure 4.12: Teacher Self-Efficacy

Figure 4.17 reveal a high mean = 4.35 and low standard deviation (Std = 0.35). The high mean indicated that their teacher self-efficacy was high while the low standard deviation indicated a normal distribution of results, so they were fit for a linear analysis.

4.5.6 Teacher self-efficacy Structural Model: To establish the measures of teacher self-efficacy, a structural equation model was developed for the same. Figure 4.18 shows the indicators measuring teacher self-efficacy identified.



Source: Survey Data, 2023

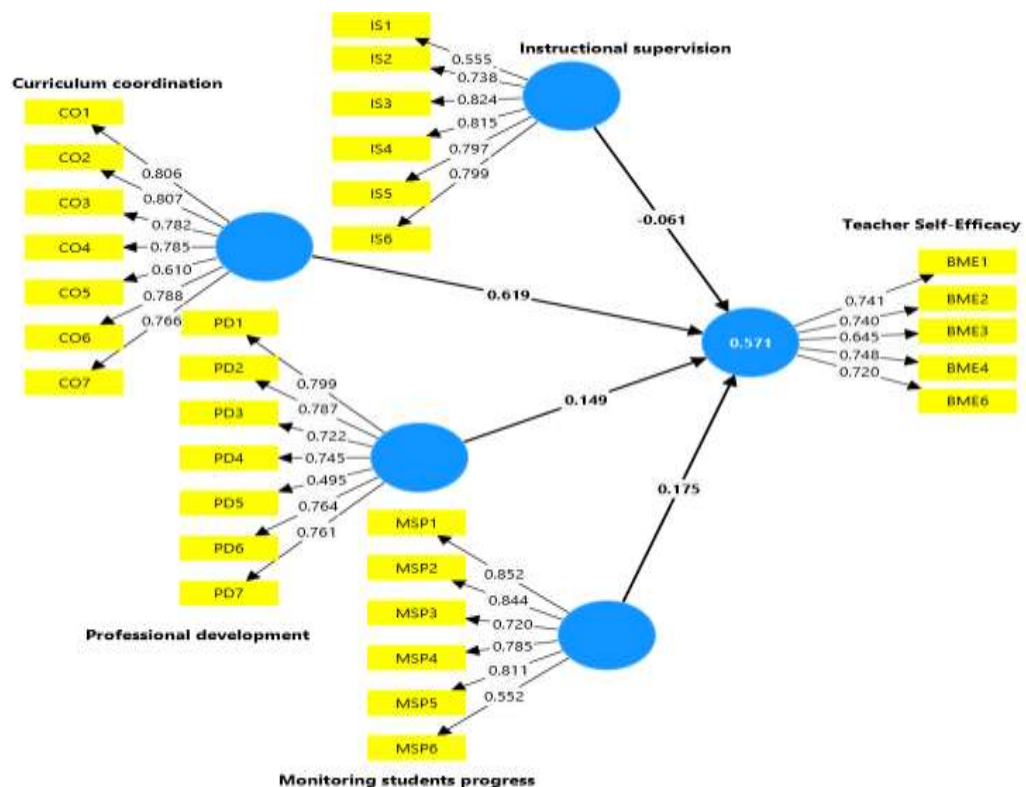
Figure 4.13 Teacher Self-Efficacy

The empirical evidence presented in Figure 4.18 underscores the multifaceted nature of teacher self-efficacy, comprising four interconnected dimensions: personal teaching efficacy, behaviour management, instructional strategies, and motivational approaches. Notably, factor analysis revealed that all indicators demonstrated robust loadings, surpassing the threshold of 0.50, thereby confirming their retention and validity. Consequently, the retained indicators provide a robust representation of the underlying constructs, with three dominant factors emerging as pivotal in explaining teacher self-efficacy.

4.5.7 Structural Model for Instructional Leadership and Teacher self-efficacy:

The study's second hypothesis proposed a significant relationship between instructional leadership and the self-efficacy of academic staff in public universities. To investigate this hypothesis, a structural equation model was

devised, which was further refined into four sub-hypotheses. These sub-hypotheses posited those specific dimensions of instructional leadership - namely, instructional supervision, curriculum coordination, professional development, and student progress monitoring - exert a profound influence on teaching quality. A structural equation model was subsequently developed to elucidate the intricate relationships between instructional leadership and teacher self-efficacy, with the causal pathways illustrated in Figure-4.19.



Source: Survey Data, 2023

Figure 4.14 Instructional Leadership and Self-efficacy

The structural equation model (Figure 4.19) provides a nuanced visualization of the inter relationships between constructs, with factor loadings, path coefficients, and coefficients of determination (R²) offering a rich tapestry of insights. Notably, the factor loadings reveal a robust connection between teacher self-efficacy and behaviour management efficacy. Conversely, instructional leadership

emerges as a multifaceted construct, encompassing pivotal aspects such as instructional supervision, curriculum coordination, professional development, and student progress monitoring. The model scrutinized four hypotheses, each positing a significant impact of instructional supervision, curriculum coordination, professional development, and student progress monitoring on the self-efficacy of academic staff. A detailed exposition of the analysis is presented in Table 4.39, which catalogues beta coefficients (β s), t-statistics, p-values, and coefficients of determination (R^2 and adjusted R^2). These metrics collectively underscore the predictive potency of instructional leadership on self-efficacy, elucidating the proportion of variance in self-efficacy attributable to the instructional leadership measures.

Table 4.40: Instructional Leadership and Self-Efficacy Estimate Path

	B	Mean	STD	T	p
Curriculum coordination → Teaching Self-Efficacy	0.619	0.627	0.123	5.014	0.000
Instructional Supervision → Teaching Self-Efficacy	-0.061	-0.054	0.050	1.220	0.223
Monitoring Students Progress → Teaching Self-Efficacy	0.175	0.172	0.080	2.195	0.028
Professional Development → Teaching Self-Efficacy	0.149	0.137	0.082	1.831	0.067
$R^2 = 0.571$					
$R^2 \text{ Adjusted} = 0.564$					

Source: Survey Data, 2023

The structural equation estimates (Table 4.40) reveal that among the four dimensions of instructional leadership, curriculum coordination ($\beta = 0.619$, $t = 5.014$, $p < 0.001$) and monitoring students' progress ($\beta = 0.175$, $t = 2.195$, $p = 0.028$) emerged as significant predictors of teacher self-efficacy, exerting a positive influence. Conversely, professional development ($\beta = 0.149$, $t = 1.831$, $p = 0.067$) demonstrated a positive yet non-significant relationship, while instructional supervision ($\beta = -0.061$, $t = 1.220$, $p = 0.223$) showed a negative and non-significant impact. Notably, the four instructional leadership elements

collectively accounted for 57.1% ($R^2 = 0.571$) of the variance in teacher self-efficacy. Upon adjusting for non-significant predictors, curriculum coordination alone explained 56.4% (adjusted $R^2 = 0.564$) of the variance. These findings underscore that curriculum coordination and monitoring students' progress are the pivotal instructional leadership dimensions influencing teacher self-efficacy.

4.6 Academic Self-efficacy and Teaching Quality

The study's third hypothesis posited a profound relationship between teacher self-efficacy and the teaching performance of academic staff in public universities. To investigate this hypothesis, a structural equation model was devised, which was subsequently refined into four nuanced sub-hypotheses. These sub-hypotheses proposed that distinct dimensions of teacher self-efficacy - namely, personal teaching efficacy, behaviour management efficacy, instructional strategies efficacy, and motivational strategies efficacy - exert a significant impact on teaching quality. A structural equation model was then developed to elucidate the complex interplay between teacher self-efficacy and teaching quality, with the causal pathways illuminated in Figure 4.20.



Source: Survey Data, 2023

Figure 4.5: Teacher Self-Efficacy and Teaching Quality

The structural equation model (Figure 4.20) examining the interplay between teacher self-efficacy and teaching quality reveals that teaching quality is contingent upon two pivotal factors: cognitive activation and classroom management. Conversely, teacher self-efficacy is comprised of four distinct dimensions: personal teaching efficacy, behaviour management efficacy, instructional strategies efficacy, and motivational strategies efficacy. The model's results, presented in Table 4.40, encompass beta coefficients (β s), coefficients of determination (R^2 and adjusted R^2), t-statistics, and p-values, collectively providing insight into the predictive capacity of teacher self-efficacy on teaching

quality. Four sub-hypotheses were scrutinized, yielding evidence that personal sense, behaviour management, instructional strategies, and motivational strategies efficacy all exert a profound impact on teaching quality. The structural equation estimates, detailed in Table 4.41, offer a nuanced understanding of these relationships.

Table 4.41: Teacher Self-Efficacy and Teaching Quality Path Estimates

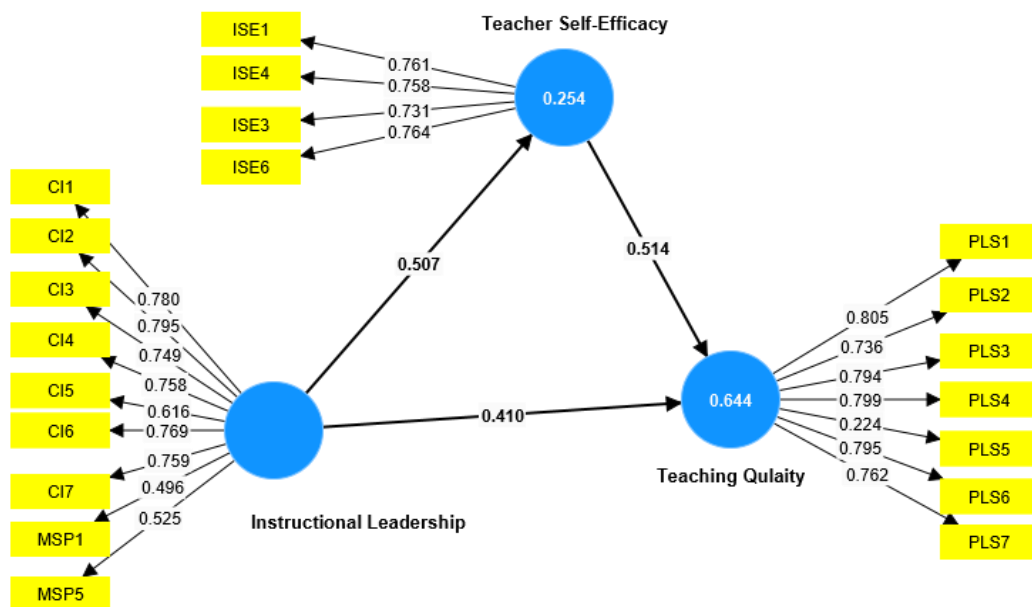
	B	Mean	STD	T	P
Behavioural Management → Teaching Quality	0.046	0.062	0.055	0.825	0.409
Instructional Strategies → Teaching Quality	0.012	0.031	0.044	0.282	0.778
Motivational Strategies → Teaching Quality	0.077	0.091	0.071	1.071	0.284
Personal Sense → Teaching Quality	0.631	0.623	0.096	6.548	0.000
$R^2 = 0.436$					
$R^2 \text{ Adjusted} = 0.427$					

Source: Survey Data, 2023

The structural equation estimates (Table 4.41) reveal that among the four dimensions of teacher self-efficacy, personal sense of efficacy ($\beta = 0.613$, $t = 6.548$, $p < 0.001$) emerged as the sole predictor exerting a substantial and positive impact on teaching quality. In contrast, the remaining facets – behaviour management ($\beta = 0.046$, $t = 0.825$, $p = 0.409$), instructional strategies ($\beta = 0.012$, $t = 0.282$, $p = 0.778$), and motivational strategies efficacy ($\beta = 0.077$, $t = 1.071$, $p = 0.284$) – demonstrated a positive yet negligible influence on teaching quality. The coefficients of determination indicated that the four teacher self-efficacy facets collectively accounted for 43.6% ($R^2 = 0.436$) of the variance in teaching quality. Upon adjusting for non-significant predictors, personal sense of efficacy alone explained 42.7% (adjusted $R^2 = 0.427$) of the variance, underscoring its paramount role in influencing teaching quality.

4.7 The Mediating Effect of Teacher Self-Efficacy on the Influence of Instructional Leadership on Teaching Quality

The study's fourth objective probed the intermediary role of teacher self-efficacy in the relationship between instructional leadership and teaching quality among academic staff in public universities. The attendant hypothesis posited that teacher self-efficacy serves as a mediating variable regarding the impact of instructional leadership on teaching quality. The structural equation model depicted in Figure 4.21 provides a visual representation of this mediating effect, elucidating the intricate dynamics between instructional leadership, teacher self-efficacy, and teaching quality.



Source: Survey Data, 2023

Figure 4.21: Mediating Effect of Teacher Self-Efficacy on Instructional Leadership and Teaching Quality Structural Model

The structural equation model (Figure 4.21) elucidates the mediating role of teacher self-efficacy in the relationship between instructional leadership and teaching quality among academic staff in public universities. Specifically, the

model reveals that instructional leadership encompasses two key dimensions - curriculum coordination and student progress management - which, in turn, influence teacher self-efficacy, particularly in terms of instructional strategies efficacy. Ultimately, teacher self-efficacy impacts teaching quality, manifesting as personal learning support. The model's results, summarized in Table 4.40, provide a comprehensive overview of the relationships between these variables, including beta coefficients (β s), coefficients of determination (R^2 and adjusted R^2), t-statistics, and p-values. These estimates demonstrate the predictive potency of the model, highlighting the significant interplay between instructional leadership, teacher self-efficacy, and teaching quality. The structural equation estimates are presented in Table 4.42.

Table 4.42: Mediating Effect of Teacher Self-Efficacy on the Influence of Instructional Leadership on Teaching Quality Path Estimates

	B	P
Instructional Leadership $\longrightarrow$ Teaching Quality	0.393	0.002
Instructional Leadership $\longrightarrow$ Teacher Self-Efficacy	0.510	0.000
Teacher Self-Efficacy $\longrightarrow$ Teaching Quality	0.525	0.000
Instructional Leadership $\longrightarrow$ Teacher Self-Efficacy	0.261	0.000
Coefficients of Determination R^2 adjusted		
Teaching Quality	0.644	

Source: Survey Data, 2023

The structural equation estimates (Table 4.42) unveil a profound impact of instructional leadership on teaching quality, with a significant and positive effect ($\beta = 0.510$, $t = 4.381$, $p < 0.001$). Furthermore, instructional leadership exerted a substantial influence on teacher self-efficacy, which, in turn, had a significant and positive impact on teaching quality ($\beta = 0.525$, $t = 4.909$, $p < 0.001$). Notably, the indirect effects revealed that instructional leadership, mediated by teacher self-

efficacy ($\beta = 0.261$, $p < 0.001$), had a positive and significant effect on teaching quality. The presence of both direct and indirect positive and significant effects indicates that teacher self-efficacy fully mediates the relationship between instructional leadership and teaching quality. The adjusted R^2 value of 0.644 signifies that instructional leadership, through teacher self-efficacy, accounts for 64.4% of the variance in teaching quality. This finding substantiates hypotheses one through four (H1-H4), underscoring the pivotal role of instructional leadership in influencing teaching quality through teacher self-efficacy.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter provides a comprehensive synthesis of the key discussions and conclusions emanating from the investigation into the complex array of factors influencing teaching quality among academic staff in public universities. A particular emphasis is placed on elucidating the mediating role of teacher self-efficacy, a crucial construct that has been found to play a pivotal role in shaping teaching quality. By integrating the findings from the study, this chapter aims to provide a nuanced understanding of the inter relationships between instructional leadership, teacher self-efficacy, and teaching quality. Furthermore, this chapter distils a set of actionable recommendations for institutional leaders, policymakers, and stakeholders, informed by the study's findings on instructional leadership, teaching quality, and teacher self-efficacy. These recommendations are designed to provide pragmatic guidance on how to enhance the educational landscape, with a particular focus on promoting excellence in teaching and learning. By providing a synthesis of the key findings and implications, this chapter aims to contribute meaningfully to the ongoing discourse on teaching quality, instructional leadership, and teacher self-efficacy, ultimately informing evidence-based practices that can enhance the quality of education in public universities.

5.1 Teaching Quality of Academic Staff

Teaching quality as the dependent variable was examined as multi-dimensional concept describing cognitive activation teaching strategies, classroom management and personal learning support. The descriptive results revealed that the teaching quality in the universities was high. That finding aligned with Noben et al. (2022) who reported that in the Netherlands teaching was excellent with the lecturers stimulating the learning climate with majority of the lectures being efficient in organisation and clear and providing structured instructions. Interestingly, the study's conclusion diverged from its foundational premise, which posited that the teaching quality of academic staff in Ugandan public universities was subpar (Atwebembeire et al., 2018; Muganga & Ssenkusu, 2019).

Moreover, this finding was also at odds with the empirical evidence presented by Bell (2022), who reported widespread student dissatisfaction with teaching quality in UK universities, underscoring a seeming paradox in the current study's outcomes. Furthermore, Dei et al. (2019) found that the quality of teaching in African universities was subpar, as evidenced by the gap between the skills needed for socio-economic progress and the knowledge provided by higher education institutions. According to Fomunyam (2018), teaching quality in South African universities was found to be low due to several challenges, including the absence of fundamental skills and essential resources needed by lecturers to effectively manage the teaching and learning process. However, the finding aligned with Dali et al.

(2017) who reported that the quality of teaching in schools in Malaysia was good. Furthermore, it contradicted the finding of Zhuo and Dong (2018) study in China which revealed that the teaching quality of the majority of foreign lecturers

was average with a big number of them below average level of the students' satisfaction. With the finding being incompatible with the study's premise and most previous scholars, it could be argued that possibly, instructional quality in the public universities in Uganda might have improved.

5.2 Instructional Leadership and Teaching Quality

This study's primary objective was to investigate whether instructional leadership plays a predictive role in determining the teaching quality of academic staff in Uganda's public universities. To this end, the study hypothesized that instructional leadership exerts a positive and significant influence on teaching quality. The findings unequivocally supported this hypothesis, revealing a substantial impact of instructional leadership on the teaching quality of academic staff. This outcome aligns with the theoretical underpinnings of the Instructional Leadership Theory (Kurnia & Purwanto, 2021), which posits that effective instructional leadership fosters teachers' professional growth and visibility, ultimately enhancing teaching quality. The study's results also resonate with existing research, including Bafadal et al.'s (2018) findings, which underscore the significant relationship between instructional leadership and teaching quality.

In a similar vein, Ahmad and Hamid (2021) found that practices of instructional leadership contributed to the improvement and enhancement of teacher effectiveness. Furthermore, Bellibaş et al. (2020) highlighted a positive and significant correlation between instructional leadership and teaching quality. Bellibaş et al. (2022) also noted that instructional leadership had a significant and positive effect on changes in teachers' classroom practices. Supporting the findings of this study, Ikegbusi et al. (2016) demonstrated that both internal and external instructional supervision positively impacted teachers' instructional

effectiveness in secondary schools. Likewise, Ismail et al. (2018) identified a strong and favourable connection between teacher effectiveness and instructional leadership, particularly in setting goals, communicating those goals, and providing professional development opportunities.

Additionally, Liu and Hallinger (2018) found that the instructional leadership practices of principals had a moderate direct and indirect influence on teachers' effectiveness. Similarly, Malunda (2017) revealed that instructional supervision significantly affected the pedagogical practices of public secondary school teachers in Uganda. Furthermore, Nyangarika and Ngasa (2020) indicated that instructional leadership positively and significantly affected the classroom instruction. Relatedly, Sanchez and Watson (2021) established that instructional leadership was responsible for practices responsible for continued success of schools. Given that the finding aligns with those of previous scholars, it can be concluded that instructional leadership has an impact on teaching quality.

It is important to highlight that each aspect of instructional leadership, including instructional supervision, curriculum coordination, professional development, and monitoring of students' progress, was examined to determine how it independently impacted teaching quality. With regard to instructional supervision, the results showed a slight negative influence on teaching quality, suggesting that it was not a significant positive predictor. This outcome aligns with the findings of Karim et al. (2021), who reported that instructional supervision had a negligible and negative effect on teachers' performance. Similarly, Nalzar Jr (2022) observed no substantial relationship between school administrators' supervision and teachers' competence. However, this finding contrasts with the conclusions of previous studies, such as Ampofo et al. (2019),

who found that the supervision of lesson planning and delivery by school leaders had a notable positive impact on teachers' performance of their roles. In a similar study, Maisyaroh et al. (2021) found that instructional supervision played a significant role in influencing teacher learning models and the use of instructional materials. In a related study, Maisyaroh et al. (2021) highlighted that instructional supervision significantly influenced the use of teacher learning models and materials.

Additionally, the finding contrasted with the results of Omaali et al. (2021), who reported that instructional supervision practices significantly enhanced teachers' professional competence, making them more effective for the benefit of learners. Similarly, the finding differed from Renata et al. (2018), who found that supervision had a positive and significant impact on teachers' effectiveness. Setia and Nasrudin (2020) also noted that instructional supervision improved teaching quality, and Zikanga et al. (2021) discovered that supervisory behaviors had a strong and significant effect on teachers' on-the-job performance. However, since this study found that instructional supervision was not a key factor in promoting quality teaching, despite overall instructional leadership having a positive and considerable impact on teaching quality, it could be inferred that instructional supervision may not be a critical aspect of instructional leadership in relation to teaching quality.

The result about curriculum coordination and the teaching quality were also contrary to the findings of the previous scholars as they showed that curriculum coordination had an adverse and marginal effect on the teaching quality. For instance, Dube and Jita (2018) had found out that when school leaders established health relations among instructors, curriculum coordination or

teaching quality was enhanced. In a similar vein, Chan et al. (2017) highlighted that the absence of institutional and curriculum support negatively impacted teaching quality. Likewise, Bahtilla and Hui (2020) emphasized that the successful implementation of the curriculum was influenced, in part, by the effectiveness of the school principal. Relatedly, Combs et al. (2022) revealed that supporting the classroom management strategies for implementation of highly interactive evidence-based interventions enhanced curriculum the fidelity or the teaching quality. In a similar situation Gelmez-Burakgazi (2020) revealed that low leadership in terms of limited school facilities and limited facilitation of curriculum fidelity hence, low-quality of teaching. That meant that the provision of sufficient resources and high facilitation led to high teaching quality. Similarly, Haquea and David (2022) reported that effective curriculum coordination. involving learners effectively and providing meaningful training to teachers led to improved teaching quality.

Furthermore, in contrast to the finding of this study, Juharyanto et al. (2018) indicated that effective leadership behaviours that included change leadership, spiritual, instructional and entrepreneurship enhanced curriculum coordination to ensure high teaching quality. Similarly, Lytal (2023) revealed that instructional leadership in curriculum coordination involving providing teachers with the required training, support supervision, resources and time for reflection led to high standards of teaching quality. In a related study, Okoth (2018) established that school leaders who strove to ensure a collective goal of fulfilling a vision and acted as positive role models, made decisions all the time, encouraged students to work hard and organised meetings with other schools to achieve subject objectives, enhanced curriculum coordination.

Relatedly, Ochwo et al. (2023) revealed that leadership effectiveness in the implementation of the curriculum positively and significantly influenced curriculum fidelity or teaching quality. In addition, Nevenglosky et al. (2018) indicated that effective curriculum coordination involving the provision of professional development to teachers, peer-collaboration and access to curriculum resources led to the desirable teaching quality in terms of curriculum fidelity. Nonetheless, with the finding of this study indicating that curriculum coordination was not essential for quality teaching yet overall instructional leadership had a sure and major impact on teaching quality, the assumption could be that it was not an important aspect of instructional leadership. Regarding the influence of professional development on teaching quality, the findings aligned with those of previous researchers, indicating that professional development had a significant and positive impact on teaching quality.

This result supported earlier studies, such as Barrera-Pedemonte (2016), who found that teachers involved in curriculum-focused professional development were more likely to use diverse instructional methods, including increased collaboration among teachers and active learning, ultimately leading to higher teaching quality. Research has consistently highlighted the pivotal role of professional growth opportunities in enhancing teaching quality. For instance, Lee and Lee (2018) discovered that career development initiatives significantly boosted job performance, including teaching quality, within educational institutions. This finding is echoed in Gore et al.'s (2017) study, which demonstrated a positive impact of professional development on teaching quality. Moreover, Liu and Liao (2019) uncovered a robust and positive correlation

between professional development programs and teachers' self-efficacy, ultimately contributing to improved teaching quality.

More so, Meyer et al. (2023) established that professional development led to high levels of cognitive activation leading to changes in teachers' professional practice. Furthermore, Ogolo and Onukwu (2019) indicated that involvement in professional development programmes had a major relationship with the quality of teachers. Moreover, the findings aligned with those of Otaka et al. (2023), who demonstrated that career development had a significant and positive impact on teacher effectiveness. Similarly, Postholm (2018) emphasized the importance of developing teachers' learning processes to foster school improvement, with professional development being a key factor in enhancing teaching quality. In a related study, Sancar et al. (2021) discovered that comprehensive, context-specific, supportive, and collaborative professional development programs led to improvements, ultimately enhancing teaching quality.

Likewise, Su and Wang (2022) highlighted that professional development equipped teachers with the knowledge and skills essential for teaching functions, thus contributing to teaching quality. In a similar manner, Zaidi et al. (2018) highlighted a strong connection between teachers' professional development and their teaching practices. Since the findings of this study were consistent with those of previous research, it can be concluded that professional development plays a crucial role in instructional leadership, particularly in relation to teaching quality. Regarding the monitoring of students' progress, the findings showed that it had a positive yet minimal impact on teaching quality, suggesting it only slightly predicted teaching quality. However, this result contradicted the conclusions of

several scholars, such as Fuchs and Fuchs (2001), who found that progress monitoring helped identify students requiring additional support or alternative instructional methods, thereby facilitating the creation of more effective instructional programs for improved performance and achievement.

Further, the finding did not align with Nunes et al. (2018)'s that monitoring had positively affected students' learning, allowing them to access knowledge and have an upper hand on the covered subject content, the lecturers' advice and monitoring made their learning more natural. Additionally, the finding was contrary to Vaccaro and Sabella (2018) who found out that monitoring was effective in ensuring the student advancement and positively affected students' overall learning and growth. Given that this finding contrasts with the results of the study, it can be inferred that monitoring students' progress is not a key factor for achieving high teaching quality in the context of Ugandan public universities.

5.3 Instructional Leadership and Teaching Self-efficacy

The study's second objective explored the extent to which instructional leadership influences the self-efficacy of academic staff in Uganda's public universities. Guiding this inquiry was the hypothesis that instructional leadership would exert a positive and significant impact on academic staff's self-efficacy. The study's findings corroborated this hypothesis, demonstrating a statistically significant relationship between instructional leadership and the teaching self-efficacy of academic staff. This outcome resonates with the theoretical framework of the Instructional Leadership Theory (Kurnia & Purwanto, 2021), which suggests that effective instructional leadership cultivates an environment conducive to teachers' professional growth, heightened visibility, and ultimately, enhanced teaching self-efficacy. The finding was consistent with the results of several previous studies.

For instance, Alanoglu (2022) found that the principal's instructional leadership was linked to teachers' self-efficacy.

Similarly, Calik et al. (2012) reported a strong and significant impact of instructional leadership on collective teacher efficacy. In the same context, Cansoy and Parlar (2018) identified a positive and meaningful relationship between school leadership and teacher self-efficacy. Additionally, Çoğaltay and Boz (2023) discovered that instructional leadership had a substantial and important effect on the collective efficacy of teachers. The finding also aligned with Hayat et al. (2022), who reported a significant and positive relationship between teaching self-efficacy and teaching quality. Similarly, Hosseingholizadeh et al. (2023) ascertained that instructional leadership had a good and major influence on the teacher's collective efficacy. Furthermore, Kaya and Koçyiğit (2023) demonstrated that leadership had a positive and significant impact on teacher self-efficacy.

In a similar vein, Khan and Gupta (2024) revealed a strong connection between the school principal's instructional leadership and teachers' self-efficacy. Likewise, Kılınç et al. (2023) confirmed the existence of a significant relationship between instructional leadership and teacher self-efficacy. Liu et al. (2021) also reported a direct and positive connection between instructional leadership and teachers' self-efficacy. Additionally, Liu et al. (2022) discovered that the principals' instructional leadership was strongly associated with teachers' instructional leadership, and both were positively related to teachers' self-efficacy. The findings of this study align with those of Ma and Marion (2021), who found that instructional leadership directly and positively impacted teachers' self-efficacy. Similarly, Özdemir et al. (2020) identified a significant relationship

between principals' instructional leadership behaviours and teachers' self-efficacy. In line with this, Xie et al. (2022) emphasized that teacher-perceived principal leadership had a positive and substantial influence on teachers' self-efficacy. Based on these consistent results, it can be inferred that instructional leadership plays a crucial role in enhancing academic staff's teaching self-efficacy. Therefore, an increase in instructional leadership is likely to lead to improvements in teaching self-efficacy.

5.4 Teachers Self-efficacy and the Teaching Quality

The study's third objective sought to investigate the predictive capacity of self-efficacy on the teaching quality of academic staff in Uganda's public universities. To this end, the hypothesis posited that significant and positive correlation exists between self-efficacy and teaching quality among academic staff in public universities. The findings substantiated this hypothesis, revealing a robust relationship between self-efficacy and teaching quality. This outcome is theoretically grounded in the Social Cognitive Theory (SCT), which posits that individuals with elevated self-efficacy are more likely to be motivated and engaged in goal-oriented activities (Bajaba et al., 2021). Moreover, the study's results echo the findings of Buric and Kim (2020), who discovered a positive correlation between teacher self-efficacy and three pivotal dimensions of teaching quality: classroom management, personal learning support, and cognitive activation.

The hypothesis proposed that self-efficacy would have a profoundly positive impact on teaching quality, and the findings unequivocally supported this notion, uncovering a robust and significant relationship between the two constructs. This empirical evidence is firmly rooted in the Social Cognitive

Theory (SCT), which suggests that individuals with high self-efficacy are more inclined to exhibit motivation, engagement, and resilience in pursuit of their goals (Bajaba et al., 2021). Furthermore, the study's outcomes align with the research conducted by Buric and Kim (2020), who identified a positive and significant correlation between teacher self-efficacy and three critical aspects of teaching quality, namely classroom management, personal learning support, and cognitive activation. Consistent with these findings, a growing body of research underscores the profound impact of teacher self-efficacy on educational quality. For instance, Hidayah et al. (2023) uncovered a significant correlation between teachers' self-efficacy and the quality of education, suggesting that self-confidence in teaching is a critical determinant of teaching quality. Similarly, Jaafari et al. (2023) emphasized the substantial positive relationship between self-efficacy and teaching effectiveness.

Künsting et al. (2016) further noted that teacher self-efficacy exhibits stability over time, serving as a reliable long-term predictor of instructional quality. However, Lazarides et al. (2021) reported a notable exception, finding no significant correlation between teacher-reported self-efficacy and improvements in teaching quality. In contrast, Poulou et al. (2019) observed that teachers with high self-efficacy perceptions demonstrated greater effectiveness in teaching and classroom management. Romel et al. (2021) similarly identified a positive link between higher self-efficacy beliefs and enhanced teaching quality, reinforcing the notion that teacher self-efficacy is a vital predictor of educational outcomes. In consonance with these findings, Yildiz and Arici (2021) discovered that pre-service teachers harboured robust self-efficacy beliefs regarding their teaching capabilities. Furthermore, Zee and Koomen (2016) elucidated a significant

correlation between teacher efficacy and practices conducive to exemplary classroom teaching quality.

The congruence between the present study's findings and those of preceding research underscores the pivotal role of teacher efficacy in shaping teaching quality. Notably, this study employed a nuanced approach by dissecting each dimension of teacher self-efficacy – personal efficacy, behaviour management efficacy, instructional strategies efficacy, and motivational strategies efficacy – to elucidate their distinct impacts on teaching quality. A salient finding pertains to teachers' personal sense of efficacy, which exerted a profound and positive influence on teaching quality. This outcome resonates with Alibakhshi et al.'s (2020) discovery that a robust personal sense of self-efficacy fosters the deployment of effective teaching strategies, thereby augmenting teaching quality. Similarly, Holzberger and Prestele (2021) identified a positive link between teacher self-efficacy and self-reported instructional quality, underscoring the far-reaching implications of teacher efficacy for teaching excellence.

Parallel findings have been reported in the literature, with Orakcı et al. (2023) noting that educators with elevated self-efficacy levels exhibited enhanced teaching proficiency. Furthermore, Poulou et al. (2019) observed that teachers harbouring higher self-efficacy perceptions tended to employ more effective instructional strategies. Sehgal et al. (2017) similarly identified a robust correlation between teacher self-efficacy and effectiveness across various domains, including course content delivery, teacher-student interactions, and learning management, all of which collectively contribute to teaching quality. Moreover, Yildiz and Arici (2021) found that pre-service teachers possessed strong self-efficacy beliefs regarding their teaching abilities. The convergence of

the present study's findings with those of preceding research underscores the critical role of teachers' personal sense of efficacy in shaping teaching quality. However, the study's results also reveal a nuanced relationship between behaviour management and teaching quality, with behaviour management exerting a positive yet marginal impact on teaching quality, suggesting its contribution to overall teaching quality is relatively negligible. However, this finding contrasts with previous studies, such as that by Adibsereshki et al. (2014), who found that reinforcement strategies significantly enhanced students' academic performance. Furthermore, this conclusion is at odds with Gooch (2017), who argued that reinforcing discipline through mutual understanding and discouraging undesirable behaviour is more effective than using forceful discipline when applied properly.

Nevertheless, the finding disagreed with Hasnah (2017) who revealed that teachers' commitment to the work, ability to encourage students and appreciate diversity introduced diverse skills and talents to teaching, which promoted critical thinking and team spirit among students reflecting good teaching quality. Additionally, the finding contradicted Khalid et al. (2021), who reported that students who received both reinforcement and punishment performed better compared to those who did not receive such interventions. In the same vein, Mustafa (2022) indicated that behavioural management skills were positively and significantly correlated to instructional management which points to teaching quality. However, with Study's finding being inconsistent with the previous scholars' findings, one could infer that behavioural management was not a dominant element of the teachers' self-efficacy in promoting teaching quality. Concerning instructional strategies and teaching quality, the findings revealed a

good but minor influence on the teaching quality. This finding also disagreed with prior studies such as Adediran et al. (2015)'s which stated that teachers' teaching approach affected teaching and learning effectiveness.

Relatedly, Cheng et al. (2019) revealed that use of appropriate instructional strategies significantly influenced the students' results and products at the end of their courses. A growing body of research highlights the significance of instructional strategies in fostering students' skill development and academic performance. For example, Le Donné et al. (2016) identified a positive correlation between instructional strategies such as active learning, cognitive activation, and teacher-directed instruction and students' skill development. Similarly, Francisco and Celon (2020) demonstrated that instructional practices have a profound impact on students' academic performance. Munna and Kalam (2021) similarly uncovered a significant relationship between teaching strategies and teaching effectiveness. However, the present study's findings diverged from those of earlier research, suggesting that, within the Ugandan university context, the efficacy of instructional strategies was not a paramount predictor of teaching quality.

Regarding the impact of motivational strategies on teaching quality, the results revealed a positive yet limited effect. This finding contrasts with preceding studies, such as Al-Said (2023), who identified a significant relationship between motivation and students' interest in learning. Additionally, Filgona et al. (2020) demonstrated that the implementation of motivational strategies, including the creation of an active learning environment that fosters student autonomy and self-directed learning, yields improved learning outcomes. Rafiola et al. (2020) and Tokan and Imakulata (2019) similarly observed that learning motivation and

motivational techniques, respectively, exert a positive influence on student achievement and learning outcomes, ultimately impacting teaching quality.

5.5 The Mediating Effect of Self-efficacy on the Relationship Between Instructional Leadership and Teaching Quality

The fourth objective of the study sought to examine whether teacher self-efficacy was a mediator between instructional leadership and teaching quality among academic staff at public universities in Uganda. The hypothesis proposed that Teacher self-efficacy would play a mediating role in the relationship between instructional leadership and teaching quality. The results of the hypothesis test indicated that the hypothesis was confirmed, demonstrating that teachers' self-efficacy mediated the relationship between instructional leadership and teaching quality among academic staff. This finding aligns with previous research, such as Bellibaş et al. (2021), who found that professional development and self-efficacy acted as mediators in the connection between principals' leadership practices and teachers' instructional practices.

Additionally, Goddard et al. (2015) discovered that the leadership of headteachers influenced the collective efficacy beliefs of teachers, which in turn improved instructional quality by encouraging teachers to work in ways that reinforced the school's belief systems supporting student learning. In line with the study's findings, Herawati and Tjahjono (2020) found that teacher self-efficacy mediated the influence of principals' instructional leadership on teachers' professional competence. Similarly, Sehgal (2015) highlighted the significant role of principal leadership in shaping teacher self-efficacy, with high self-efficacy among teachers contributing to more effective teaching. Furthermore, Zainal and Matore (2021) demonstrated that the transformational leadership practices of

school administrators, along with teacher self-efficacy, played a key role in enhancing teaching quality through innovative behaviour. However, this finding differed from that of Mwansa (2019), who reported no connection between these variables. Given the alignment of the study's findings with those of previous research, it can be concluded that teacher self-efficacy is essential in the relationship between instructional leadership and teaching quality.

5.6 Summary of Findings

This section provides an in-depth examination of the academic staff's perceptions regarding teaching quality within public universities in Uganda. Furthermore, it presents a comprehensive analysis of the academic staff's self-efficacy ratings, coupled with their assessments of the instructional leadership exhibited by university administrators.

5.6.1 Teaching Quality in Public Universities: Teaching quality was measured in terms of cognitive activation, classroom management and personal learning support. Descriptive results revealed that academic staff rated cognitive activation (mean = 4.26), classroom management (mean = 4.37) and personal learning support (mean = 4.27). The overall mean for teaching quality was (mean = 4.35). This means that academic staff rated teaching quality in the universities to be high. This means that academic staff used teaching strategies that cognitively activated students, made effort to provide personal learning support students and ensured effective classroom management.

5.6.2 Instructional Leadership and Teaching Quality: Instructional leadership (independent variable) was conceived in terms of instructional supervision (mean = 3.72), curriculum coordination (mean = 4.20), professional development (mean

= 4.36) and monitoring student progress (mean = 4.25). The overall mean instructional leadership was (mean = 4.25). This indicates that academic staff rated the instructional leadership at universities as high. The path estimates showed that among the aspects of instructional leadership, only professional development ($\beta = 0.430$, $t = 5.189$, $p = 0.000 < 0.05$) had a strong and significant impact on teaching quality. On the other hand, monitoring student progress ($\beta = 0.182$, $t = 1.476$, $p = 0.624 > 0.05$) had a positive but minor influence on teaching quality, while instructional supervision ($\beta = -0.055$, $t = 0.526$, $p = 0.580 > 0.05$) and curriculum coordination ($\beta = -0.197$, $t = 1.589$, $p = 0.580 > 0.05$) had a negative and negligible effect on teaching quality.

The R^2 value indicated that the four aspects of instructional leadership accounted for 31.1% ($R^2 = 0.311$) of the variation in teaching quality among academic staff. The adjusted R^2 revealed that professional development, the only significant aspect of instructional leadership, explained 30.0% (adjusted $R^2 = 0.300$). Therefore, only professional development significantly contributed to teaching quality. However, overall hypothesis test results revealed that instructional leadership ($\beta = 0.510$, $t = 4.381$, $p = 0.000 < 0.05$) had a positive and meaningful effect on teaching quality. This meant that hypothesis one (H1) was supported.

5.6.3 Instructional Leadership and Teacher Self-Efficacy: Teacher self-efficacy (mediating variable) was conceived in terms of personal sense (mean = 4.39), behaviour management (mean = 4.35), instructional strategies (mean = 4.33) and motivational strategies efficacy (mean = 4.43). The overall mean for teaching self-efficacy (mean = 4.35) indicated that teachers rated their self-efficacy to be high. The path analysis results indicated that two aspects of instructional

leadership, namely curriculum coordination ($\beta = 0.613$, $t = 4.907$, $p = 0.000 < 0.05$) and monitoring students' progress ($\beta = 0.189$, $t = 2.333$, $p = 0.020 < 0.05$), had a strong and significant impact on teacher self-efficacy. Meanwhile, professional development ($\beta = 0.141$, $t = 1.758$, $p = 0.079 < 0.05$) had a noticeable but relatively minor influence on teaching quality. On the other hand, instructional supervision ($\beta = -0.057$, $t = 1.152$, $p = 0.250 > 0.05$) showed a negative and weak effect on teaching self-efficacy.

R² suggested that the four instructional leadership elements explained 57.3% ($R^2 = 0.573$) of the academic staff's variances in teaching self-efficacy. Adjusted R² showed that the only significant instructional leadership element of professional development, explained 56.6% (adjusted $R^2 = 0.566$). Hence, among the four aspects of instructional leadership, only curriculum coordination and monitoring students' progress have an impact on teacher self-efficacy. The overall hypothesis test showed that instructional leadership significantly influenced teacher self-efficacy ($\beta = 0.525$, $t = 4.909$, $p = 0.000 < 0.05$), which also had a notable effect on teaching quality. This confirms that hypothesis two (H2) was supported.

5.6.4 Teacher Self-Efficacy and Teaching Quality: The path analysis revealed that among the four dimensions of teacher self-efficacy, only personal sense of efficacy ($\beta = 0.613$, $t = 6.548$, $p < 0.001$) exerted a substantial and positive influence on teaching quality. In contrast, the other three aspects – behaviour management ($\beta = 0.046$, $t = 0.825$, $p = 0.409$), instructional strategies ($\beta = 0.012$, $t = 0.282$, $p = 0.778$), and motivational strategies efficacy ($\beta = 0.077$, $t = 1.071$, $p = 0.284$) – had a minimal yet discernible impact on teaching quality. The results indicated that the four teacher self-efficacy aspects collectively explained 43.6% ($R^2 = 0.436$) of the

variance in teaching quality. Upon adjusting for the significant predictor, personal sense of efficacy, the adjusted R² revealed that this single aspect accounted for 42.7% (adjusted R² = 0.427) of the variance. Notably, the overall hypothesis test confirmed that teacher self-efficacy ($\beta = 0.525$, $t = 4.909$, $p < 0.001$) had a profound impact on teaching quality.

5.6.5 Mediating Effect of Teacher Self-Efficacy on Instructional Leadership and Teaching Quality

The indirect results revealed that instructional leadership mediated by teacher efficacy ($\beta = 0.261$, $p = 0.000 < 0.05$) positively and significantly influenced the teaching quality. R₂ showed that instructional leadership mediated by self-efficacy accounted for 64.4% (R² adjusted = 0.644) of the variation teaching quality. Therefore, instructional leadership through teacher self-efficacy influences teaching quality. This meant that hypothesis four (H4) was supported.

5.7 Conclusions

Following a consideration of the data, the following conclusions were drawn regarding academic staff teaching quality and instructional leadership as mediated by self-efficacy;

1. Instructional leadership in universities predicts and enhances the teaching quality of academic staff. In terms of instructional leadership, the roles entail academic leaders emphasising professional development opportunities for the academic staff in order to enhance their knowledge and teaching skills and improve their attitude. Opportunities for professional growth include deliberate training programs offered through conferences, seminars, workshops, study tours, and travels both domestically and abroad.

Additionally, it entails scheduling regular reflection sessions on both the teaching and the feedback provided by students.

2. Instructional leadership is a requirement for teacher self-efficacy. This is when the leaders are able to carry out effective curriculum coordination in the universities and monitor the students' progress. Regarding curriculum coordination, this is when instructional leaders encourage the academic staff to carry out teaching as planned, to designate staff responsible for coordinating curriculum, encourage the academic staff to ensure their students are engaged in innovative activities, see to it that the academic staff mark and submit grades of students in time, convert university goals into common objectives of the curriculum and to make follow up to make ensure that the academic staff implement the curriculum the way the programmes demand. Regarding monitoring of the students' progress, this is when superiors meet the academic staff individually to discuss issues of students' progress, to discuss the students' results with the academic staff, and devise appropriate instructional programmes for the students whose test results indicate very low performance.
3. A strong symbiosis exists between the effectiveness of university teaching and the self-efficacy of academic staff in their instructional roles. This implies that academic staff possess confidence in their capabilities to facilitate student learning, moderate stimulating discussions, tailor their teaching approaches to accommodate diverse learning styles, foster student engagement, and pioneer innovative lecture delivery methods. It also indicates that these educators are flexible in their approach to teaching, actively identify and address student concerns before they escalate, and foster

an environment where students feel comfortable expressing their thoughts and emotions during class.

4. Instructional leadership, mediated by teacher self-efficacy, emerges as a vital catalyst for elevating teaching quality in university settings. Specifically, the effective coordination of curricula and monitoring of student progress rely significantly on the self-efficacy of academic staff, particularly in relation to instructional strategies. This underscores the capacity of academic staff to facilitate students' cognitive connections, reinforce prior knowledge, and foster a deeper understanding of complex concepts, tailoring their teaching to meet the diverse needs of students, planning lessons effectively, and providing clear instructions to facilitate learning.

5.8 Recommendations

The aforementioned conclusions regarding instructional leadership's role as a predictor of academic staff members' teaching quality through self-efficacy led to the following suggestions:

1. Academic leaders in universities and other higher education establishments, like the Uganda National Institute of Teacher Education (UNITE), ought to offer instructional leadership that fosters teaching quality. It is important that these leaders provide opportunities for professional development so that the faculty members can consistently enhance their knowledge, pedagogical expertise, and disposition. The chances for professional development include deliberate advancement of one's skills through conferences, seminars, workshops, study tours, and travels both domestically and abroad. In addition, the administrators of the university ought to schedule frequent reflection sessions on both the instruction and the student input. The Ministry

of Education and Sports ought to take into account some of the findings and suggestions from this study to improve the professional development framework that was introduced in 2017.

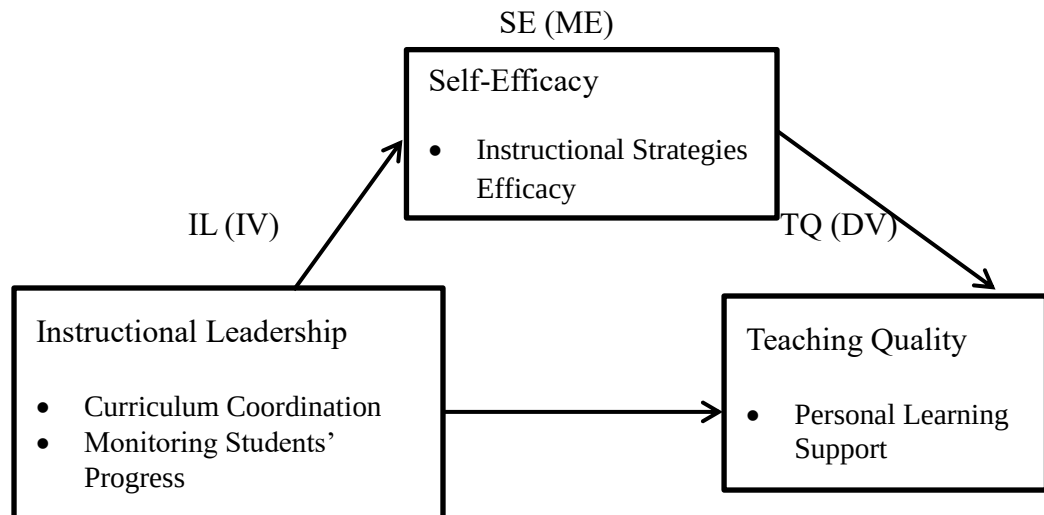
2. University instructional leaders should offer guidance that enhances lecturers' confidence in their abilities. Additionally, university leaders must improve the coordination of curricula and more effectively monitor students' progress. Additionally, they should guide and support academic staff in carrying out planned instruction, assign departmental coordinators for curriculum coordination, encourage staff to involve students in creative learning activities, make sure the lecturers mark exams and provide student grades on time, translate university goals into curriculum objectives, and conduct follow-ups to guarantee staff adheres to program requirements. When it comes to student monitoring, department heads should have one-on-one meetings with academic staff members to talk about concerns pertaining to students' progress, review students' test results, and create lecture and course work plans that are suitable for students whose performance on the tests is extremely low.
3. Improving their self-efficacy is essential for academic staff members who aim to enhance the quality of their teaching. They should read a range of books and articles on contemporary teaching techniques, participate in department reflection meetings or observation sessions, and hold academic debates to learn from their peers. Additionally, the faculty should come up with plans for getting students to follow directions, teach effectively in the classroom, modify their curricula to accommodate students' cognitive and psychological needs, let students express their feelings during lectures, and

try to be creative in how they present their material. Academic staff members should also strive to recognize their students' issues before they worsen and be adaptable in their lecture delivery.

4. Curriculum coordination and monitoring students' progress should rely on teachers' self-efficacy particularly on instructional strategies. Therefore, the university leaders should devise ways of enhancing the instructional strategies efficacy of the academic staff for them to aid students link their learning to prior knowledge; to focus the curriculum content on students' needs, effectively plan for teaching and provide students with clear guidance for learning.

5.9 Theoretical and Practical Contribution of the study

An empirical model (Figure 5.1) was created in this study to promote teaching quality through instructional leadership mediated by teacher self-efficacy. This model was adapted from the conceptual framework (Figure 1.1), which illustrated the causal relationships between instructional leadership and teaching quality, through teacher self-efficacy.



Source: Survey Data, 2023

Figure 5.1 Empirical Model for Instruction Leadership and Teaching Quality through Teacher Self-Efficacy

Figure 5.1 presents a conceptual model illustrating the hypothesised causal relationship between instructional leadership (IL) as the independent variable and teaching quality (TQ) as the dependent variable. In this model, instructional leadership is characterised by key practices namely curriculum coordination and the systematic monitoring of student progress. These elements are proposed to exert a direct and indirect influence on teaching quality, which is conceptualized in terms of two primary dimensions: the level of personal learning support provided to students and the degree of teacher self-efficacy. A significant aspect of this model is the mediating role of teacher self-efficacy (SE), particularly with regard to instructional strategies. The model suggests that instructional leadership does not only impact teaching quality in a direct manner but also shapes it indirectly by enhancing teachers' confidence and perceived competence in employing effective instructional methods. In essence, stronger instructional leadership practices may foster greater self-efficacy among teachers, which in turn leads to improved teaching practices and better student support.

5.10 Contribution to the Body of Existing Knowledge

The study contributed two articles in peer reviewed journals as indicated below;

Tiguryera, S., Mugizi, W., & Ssettumba, J. B. (2024). Instructional leadership and self- efficacy of academic staff in public universities in Uganda. *East African Journal of Education Studies*, 7(3), 391-407. DOI: <https://doi.org/10.37284/eajes.7.3.2159>

Tiguryera S., Mugizi, W., & Ssettumba, J. B. (2024). Self-Efficacy and Teaching Quality of Academic Staff in Public Universities in Uganda. *Interdisciplinary Journal of Management Sciences*, 1, 1-15. <https://doi.org/10.38140/ijms-2024.vol1.08>

5. 11 Limitations of the Study and Suggestions for Further Research

The study made a significant contribution with respect to showing how teacher self-efficacy moderated the influence of instructional leadership on teaching quality. However, while in direct relationships structural equation model results revealed that only professional development led to the teaching quality, and only curriculum development and monitoring students' progress influenced the teacher self-efficacy and for teacher self-efficacy only teacher personal sense of efficacy influenced the teaching quality, the mediation test results were to the contrary (figure 5.1). Those finding suggested that the original model (figure 1.1) should be retested using more universities including private universities. On the other hand, the new model needs to be tested to ascertain int authenticity. Further still, this study was only quantitative; therefore, future research should involve the qualitative approach for in-depth analysis.

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APPENDICES

Appendix 1: Questionnaire for University Academic Staff

Kyambogo University

P.O. Box 1,

Kyambogo, Uganda

November 2022

Dear participant,

My name is Scholastica Tiguryera pursuing a PhD in Educational Planning and Management at Kyambogo University. I am collecting data on the topic entitled “Instructional leadership and teaching quality of academic staff through self-efficacy in public universities in Uganda”. Your genuine response will be highly value.

Scholastica Tiguryera

PhD student-Kyambogo University

Section A: Background Variables: Classification of Teaching Staff

Kindly tick the correct response to categorize yourself.

A1 Gender: 1 = Male 2 = Female

A2 Marital status: 1= Single never married, 2 = Single ever married 3 = Married,
4= Cohabiting

A3 Highest academic qualification accomplished. 1 = Bachelor’s Degree, 2 = Master’s Degree, 3= PhD

A4 = Appointment level: 1 = Graduate Fellow, 2 = Assistant lecturer, 3 = Lecturer, 4 = Senior lecturer, 5 = Associate Professor, 6 Professor

A5: Responsibility in the university hierarchy? 1 = Administrator , 2 = non-Administrator

A6 For how long have you been teaching at your current university? 1 = Less than 1 year,

2= One to two years, 3 = Three to four years, 4 = Five years and above

Section B: Teaching Quality (DV)

This section outlines the components of teaching quality, which are categorized into three key dimensions: classroom management (M), personal learning support (PLS), and cognitive activation (CA). Please indicate how these aspects are represented in your teaching practices at your university by using the following scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree (A), 5 = Strongly Agree (SA).

CA	Cognitive Activation Teaching Strategies	SD	D	NS	A	SA
		1	2	3	4	5
CA1	I assign tasks and pose questions that challenge my students to think critically.					
CA2	I occasionally encourage students to create their own questions and propose possible answers.					
CA3	I encourage students to keep reflective journals or learning logs, which serve as a catalyst for introspection, fostering a deeper understanding of their academic journey and promoting critical thinking.					
CA4	In every lecture, I facilitate a reflective practice where students engage in a metacognitive exercise, individually and in collaborative groups, to revisit and build upon their existing knowledge foundations.					
CA5	I implement participatory teaching methods to promote effective learning.					
CA6	I inspire my students to expand their knowledge by utilizing various resources, such as books, online research, peer discussions, and seminars.					
CA7	I encourage I motivate my students to share and present the knowledge they have acquired from different sources with their peers.					

CM	Classroom Management	SD	D	NS	A	SA
		1	2	3	4	5
CM1	I prepare my lectures and arrange instructional materials in advance.					
CM2	I make the most of lecture time by concentrating on my planned content.					
CM3	I establish clear expectations and routines for the class in collaboration with students.					
CM4	I take appropriate steps to restore order when students deviate from the established rules and routines.					
CM5	I make every effort to minimize disruptions during lectures.					
CM6	I strive to foster an environment that supports and enhances student learning.					
PLS	Personal Learning Support	SD	D	NS	A	SA
		1	2	3	4	5
PLS1	I provide individual support to students whenever needed.					
PLS2	I tailor my lectures to address the specific needs of individual students.					
PLS3	I promote and plan activities that foster self-regulated learning among students.					
PLS4	I offer feedback on both individual and group assignments, as well as on in-class activities.					
PLS5	I engage students in innovative projects and encourage them to present their work to their peers during lectures.					

PLS6	I welcome feedback from students on the quality of my lectures and respond to it with a positive attitude.					
PLS7	I foster teamwork by assigning group projects and collaborative tasks.					

Section C: Instructional Leadership (IV)

This section examines Instructional Leadership (IL), which is categorised into four components: Instructional Supervision (IS), Curriculum Instruction/Coordination (CI), Professional Development (PD), and Monitoring Student Progress (MSP). Kindly assess how often you observe different instructional leadership practices at your university, using the scale provided: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree (A), 5 = Strongly Agree (SA).

ISE	Instructional Supervision	SD	D	NS	A	SA
		1	2	3	4	5
IS1	My superiors in this university visit classes regularly to observe teaching and learning					
IS2	My superiors in this university provide constructive feedback after observing lectures' lessons					
IS3	My superiors in the department/faculty/school/college sometimes conduct informal observations in classrooms					
IS4	My superiors in this university frequently observe lectures teach and discuss strategies for improvement.					
IS5	My superiors in the department/faculty/school/college meet with academic staff about how to conduct effective teaching					

IS6	My superiors in this university are actively involved in teaching quality development					
CI	Curriculum Coordination	SD	D	NS	A	SA
		1	2	3	4	5
CI1	University management encourages academic staff to plan so as to make curriculum effective.					
CI2	Management of the university has clearly designated those responsible for coordinating curriculum coordination across all departments.					
CI3	University management encourages academic staff to engage their students in innovative activities.					
CI4	Management of the university requests for reports from departments about curriculum coordination by academic staff					
CI5	Management has ensured that academic staff mark and provide grades of students in time					
CI6	My supervisors at this university make sure that the university's academic goals are integrated into the shared objectives of the curriculum.					
CI7	University management makes follow up to ensure that academic staff implement the curriculum the way the programme demands					
PD	Professional Development	SD	D	NS	A	SA
		1	2	3	4	5
PD1	I have developed all the necessary skills to carry effective teaching					

PD2	My superiors exhibit confidence in my development as a professional.					
PD3	Since I began working, I have experienced considerable professional growth.					
PD4	As time has passed, my performance as a university teacher has significantly improved.					
PD5	My colleagues appreciate my professional growth					
PD6	With my current knowledge, I am able to teacher satisfactorily					
PD7	I feel I have become a more competent as a professional university teacher					
MSP	Monitoring Student Progress	SD	D	NS	A	SA
		1	2	3	4	5
MSP1	Superiors in this university meet academic staff individually to discuss issues of students' progress					
MSP2	Superiors in this university discuss students' results with academic staff which helps to strengthen curricula implementation					
MSP3	Superiors in this university discuss results with academic staff to point out strengths and areas of improvement in instruction					
MSP4	My superiors in this university identify students whose test results indicate a need for remediation or enrichment					

MSP5	Management devises appropriate instructional programmes are devised for students whose test results indicate very low performance.					
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Section D: Teacher Self-Efficacy (MEV)

Section C includes items related to teacher self-efficacy, which are divided into four sub-sections: Personal Sense of Efficacy (PSF), Behaviour Management Efficacy (BME), Instructional Strategies Efficacy (ISE), and Motivational Strategies Efficacy (MSE). Please indicate the degree to which these aspects of self-efficacy are present in your teaching practices as a lecturer at your university, using the following scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree (A), 5 = Strongly Agree (SA).

PSF	Personal Sense of Efficacy	SD	D	NS	A	SA
		1	2	3	4	5
PSF1	Students follow instructions during class.					
PSF2	I deliver academic content with a high level of competence					
PSF3	I tailor the intricacy of my instructional approach to align with my students' comprehension levels, ensuring an optimal learning environment.					
PSF4	I foster a supportive and inclusive classroom environment where students feel empowered to express their thoughts, emotions, and perspectives freely and without reservation.					
PSF5	I empower students to embark on cutting-edge projects that foster creativity and innovation, and provide a platform for them to showcase their					

	work through peer-to-peer presentations, facilitating a dynamic and collaborative learning environment.					
PSF6	I adopt a dynamic and adaptable approach to instruction, seamlessly adjusting my lecture delivery to accommodate diverse learning styles, unexpected discussions, and emerging student needs.					
PSF7	I make an effort to be adaptive to new ways of delivering lectures					
PSF8	I am skilled at identifying and addressing my students' problems before they escalate					
PSF9	I make a conscious effort to provide students with opportunities to openly share their thoughts and feelings during lessons					
BME	Behaviour Management Efficacy	SD	D	NS	A	SA
		1	2	3	4	5
BME1	I can quickly redirect a student who disrupts a lesson.					
BME2	I clearly communicate my expectations for appropriate behaviour to students.					
BME3	I can effectively manage any type of student with confidence.					
BME4	I am skilled at keeping defiant students engaged in my lessons.					

BME5	I ensure that students consistently meet my expectations.					
BME6	I prevent disruptive students from interfering with class activities.					
BME7	I can effectively refocus students if they stop working.					
BME8	I engage students' attention in large classes by varying my voice tone, using facial expressions, and adjusting my proximity to them.					
ISE	Instructional Strategies Efficacy	SD	D	NS	A	SA
ISE1	I assist students in connecting and building upon their prior knowledge to promote effective learning.	1	2	3	4	5
ISE 2	I employ a differentiated questioning approach in class, utilizing a range of inquiry types to evaluate students' comprehension across various cognitive levels, from basic recall to higher-order thinking					
ISE 3	I adopt a student-centric approach, meticulously adapting the curriculum to accommodate the diverse needs, abilities, and learning styles of each individual, thereby fostering a supportive and inclusive environment that cultivates academic success for all					
ISE4	Before teaching a skill, I analyse the task and determine the necessary steps to achieve my objectives					

ISE5	To cultivate innovative thinking and self-expression, I empower students to showcase their learning through a range of multimodal presentations, embracing diverse formats such as visual displays, performances, and digital media, thereby celebrating creativity and individuality.					
ISE6	To facilitate deeper understanding and promote academic autonomy, I explicitly guide students in developing effective organizational strategies, providing transparent and structured instructions that enable them to navigate complex tasks, prioritize assignments, and manage their time efficiently.					
MSE	Motivational Strategies Efficacy (MSE)	SD	D	NS	A	SA
		1	2	3	4	5
MSE	I have built strong rapport with my students and listen to them to demonstrate that I care.					
MSE2	I make time to allow students to share their personal experiences with me, offering guidance when needed.					
MSE3	I encourage my students to set goals and create action plans to guide their learning.					
MSE4	I consistently advise students to work diligently and achieve their goals within the set timelines.					

MSE5	I ensure that the assignments I give are manageable, helping to build students' confidence.					
MSE6	I engage students in collaborative learning to enhance their participation and enjoyment in the learning process.					
MSE7	I provide targeted positive reinforcement and feedback to motivate students.					

Thank you for participating in the study

Appendix 2: Anti- Plagiarism Clearance Certificate

Appendix 3: Kyambogo University Introductory letter



APPENDIX 8

Date: 31/07/2023

TO WHOM IT MAY CONCERN

RE: SCHOLASTICA TIGURYERA

Dear Sir/Madam,

This is to introduce to you the above named student Reg: No **19/U/GDED/818566/PD** Pursuing PhD in Education, Department of Educational Planning and Management, Kyambogo University. She intends to carry out research on **Instructional Leadership and Teaching Quality of Academic Staff Mediated by Self-Efficacy in Public Universities in Uganda** in partial fulfillment of the requirements of the award of Doctor of Philosophy in Education

The purpose of this letter therefore is to request you to grant her permission to carry out her study in your institution.

Any assistance rendered to her will be highly appreciated.

Yours sincerely,

Prof. Bosco Bua
AG. DIRECTOR



Appendix 4: Gulu University Data Collection Permission Letter

GULU

P. O. Box 166
Gulu - Uganda



UNIVERSITY

TEL +256 471 432093
FAX +256 471 432946
Email: vc@gu.ac.ug
URL: www.gu.ac.ug

OFFICE OF THE VICE CHANCELLOR

Our Ref: GU/VC/213/01

August 22, 2023

Scholastica Tiguryera
Registration No. 19/U/GDED/818566/PD
Tel: 0772459544/0701187843; Email: stigurera@yahoo.com

Dear Tiguryera,

**RE: REQUEST FOR PERMISSION TO COLLECT DATA FROM GULU UNIVERSITY
FOR YOUR PHD STUDY AT KYAMBOGO UNIVERSITY**

Your letter dated 21st August, 2023 refers.

This is to inform you that your request is granted to enable you collect Data from Gulu University for your PhD study at Kyambogo University.

Yours Sincerely,

Prof. George Ladaah Openjuru
VICE CHANCELLOR

Appendix 5: Makerere University Data Collection Permission Letter

MAKERERE

P.O. Box 7062
Kampala, Uganda
Website: www.mak.ac.ug



UNIVERSITY

Tel: +256-414-532045
Fax: +256-414-533640
Email: dvcaa@mak.ac.ug

**OFFICE OF THE FIRST DEPUTY VICE-CHANCELLOR
(Academic Affairs)**

MAK/DVCAA/311/2023

Tuesday, August 22nd, 2023

**All
Academic Staff
Makerere University**

Re: Authorization to carry out Research in Makerere University

Ms Tiguryera Scholastica is a PhD student pursuing her study in Education from Kyambogo University. She is currently conducting a research study on "*Instructional Leadership and Teaching Quality of Academic Staff Mediated by self-efficacy in Public Universities in Uganda*". The study will cover four universities across the four regions of Uganda and Makerere University is one of the key Institutions that she's collecting data from.

Information collected from her research findings will strictly be for academic purposes and therefore shall be kept with utmost confidentiality.

The purpose of this communication, therefore, is for you to provide her with the necessary information and support to enable her complete the data completion process.

Yours sincerely,

**Umar Kakumba (PhD)
DEPUTY VICE CHANCELLOR (ACADEMIC AFFAIRS)**



In future correspondence please quote the reference number above

Appendix 6: MUST Data Collection Permission Letter



MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O.BOX 1410, Mbarara Uganda. Tel: +256 4854 20782; Fax: +256 4854 2782

DEPARTMENT OF HUMAN RESOURCES

Our ref: MUST 18/3

29th August, 2023

Ms. Scholastica Tiguryera

C/O Kyambogo University (Reg. 19/U/GDED/818566/PHD

P.O.Box 1

Kampala

Tel.: 0772-459544/0701187843

Dear Ms. Tiguryera,

RE: REQUEST FOR PERMISSION TO COLLECT DATA FROM MBARARA UNIVERSITY OF SCIENCE & TECHNOLOGY FOR PHD RESEARCH AT KYAMBOGO UNIVERSITY

This is in response to the letter dated 31st July 2023 from your Director of Research and Graduate Training, requesting for permission for you to carry out your data collection exercise for PhD research under the topic: *"Instructional Leadership and Teaching Quality of Academic Staff Mediated by Self-Efficacy in Public Universities in Uganda"*.

The purpose of this letter, is to inform you, that permission has been granted for you to collect the necessary data in this University as requested.

Those concerned are requested to provide you with the necessary support to enhance your data collection exercise.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Hellen Akello Bagyenda'.

Hellen Akello Bagyenda

FOR: CHIEFHUMAN RESOURCES OFFICER

Website: <http://www.must.ac.ug>

Appendix 7: Busitema University Data Collection Permission Letter

 BUSITEMA UNIVERSITY <i>Empowering Excellence</i>	P.O. Box 298, Tumwe, Uganda Tel: +256-45-949494 Fax: +256-45432517 Email: info@busitema.ac.ug Website: www.busitema.ac.ug
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DIRECTORATE OF GRADUATE STUDIES, RESEARCH, AND INNOVATIONS

11th January 2024

Our Ref: BU/VC/220/1/01

Scholastica Tiguryera

Registration No. 19/U/GDED/818566/PD lei: 0772459544/0701187843; Email: stiguryera@yahoo.com

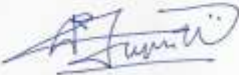
Dear Tiguryera,

RE: REQUEST FOR PERMISSION TO COLLECT DATA FROM BUSITEMA UNIVERSITY FOR YOUR PHD STUDY AT KYAMBOGO UNIVERSITY.

Reference is made to your letter dated 21st August, 2023.

This is to inform you that your request is granted to enable you Collect Data from Busitema University for your PhD study at Kyambogo University.

Yours sincerely,



Samson Rwahwire Ph.D., NEFF., FUNAS
Associate Professor
Director Graduate Studies, Research and Innovations.

Appendix 8: REC Approval Letter



Research Ethics Committee (MUREC)

11 December 2023

Scholastica Tiguryera
Principal Investigator

Type: ☒ Initial Review
☐ Expedited
☐ Protocol Amendment
☐ Continuing Review
☐ Other, Specify

Dear Scholastica,

Re: Research approval: # MUREC-2023-310 "Instructional leadership and teaching quality of academic staff mediated by self-efficacy in public universities in Uganda".

Thank you for submitting this application for approval of the above-referenced protocol to MUREC.

I am glad to inform you that approval is hereby given to conduct the study; this approval is given following your exhaustive responses to initial comments raised by MUREC. The approval is for one-year, effective 11 December 2023, and will expire on 11 December 2024.

As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the **MUREC** for re-review and approval prior to the activation of the changes. The MUREC application number assigned to the research should be cited in any correspondence.
3. Reports of unanticipated problems involving risks to participants or others must be submitted to the **MUREC**. New information that becomes available that could change the risk: benefit ratio must be submitted promptly for **MUREC** review.
4. Only approved consent forms are to be used in the enrolment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The **MUREC** may conduct audits of all study records, and consent documentation may be part of such audits.
5. Regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the MUREC Two months prior to the above expiration date of [11 December 2024] in order to**

Location/Correspondence
Mildmay, Uganda
Plot 27, Lweza
P.O Box 24985, Kampala

Communication
Tel: 0392174236
Email: murec@mildmay.or.ug
www.mildmay.or.ug

Guiding Research For the Future

Appendix 9: UNCST Approval Letter



Uganda National Council for Science and Technology
(Established by Act of Parliament of the Republic of Uganda)

Our Ref: SS2245ES

25 January 2024

SCHOLASTICA TIGURYERA
KYAMBOGO UNIVERSITY
Kampala

Re: Research Approval: Instructional leadership and teaching quality of academic staff mediated by self-efficacy in public universities in Uganda

I am pleased to inform you that on 25/01/2024, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of 25/01/2024 to 25/01/2026.

Your research registration number with the UNCST is SS2245ES. Please, cite this number in all your future correspondences with UNCST in respect of the above research project. As the Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. Keeping all co-investigators informed of the status of the research.
2. Submitting all changes, amendments, and addenda to the research protocol or the consent form (where applicable) to the designated Research Ethics Committee (REC) or Lead Agency for re-review and approval prior to the activation of the changes. UNCST must be notified of the approved changes within five working days.
3. For clinical trials, all serious adverse events must be reported promptly to the designated local REC for review with copies to the National Drug Authority and a notification to the UNCST.
4. Unanticipated problems involving risks to research participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST notification after review by the REC.
5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.
6. An annual progress report and approval letter of continuation from the REC must be submitted electronically to UNCST. Failure to do so may result in termination of the research project.

Appendix 10: Approved Informed Consent Form

Study Title: Instructional leadership and teaching quality of academic staff mediated by self-efficacy in public universities in Uganda.

INFORMED CONSENT FORM FOR QUANTITATIVE DATA COLLECTION FROM ACADEMIC STAFF; VERSION 2, DATED 11TH NOVEMBER, 2023

PID: _____

Introduction/Background

I am **Scholastica Tiguryera** a student at Kyambogo University, Kampala, Uganda, pursuing a Ph.D. in Education. My educational study topic is: "**Instructional Leadership and Teaching Quality of Academic Staff Mediated by Self-efficacy in Public Universities in Uganda**".

In this study;

Instructional Leadership refers to instructional supervision, curriculum implementation, professional development and monitoring students' progress;

Teacher Self-efficacy refers to academic staff's sense efficacy, behaviour management, instructional strategies and motivational strategies efficacy;

Teaching Quality denotes cognitive activation teaching strategies, classroom management and personal learning support.

There is a persistent issue of teaching quality in higher institutions of learning, evidenced in empirical studies, mainly conducted in non-Ugandan contexts. Aware that rapid changes consistently take place, the teaching quality in education institutions should match the changes. This study will investigate factors that relate to teaching quality, particularly instructional leadership and self-efficacy. The study will investigate factors that relate to teaching quality particularly instructional leadership and self-efficacy.

Purpose of the Study

The purpose of this proposed study will be to investigate the influence of instructional leadership on teaching quality of academic staff mediated by self-efficacy in public Universities in Uganda.

Objectives of the study

- i. Examine the influence of instructional leadership on teaching quality of academic staff in public universities in Uganda.
- ii. Assess the influence of instructional leadership on self-efficacy of academic staff in public universities in Uganda.
- iii. Examine the influence of self-efficacy of academic staff on teaching quality in public universities in Uganda.



Appendix 11: Abstract for the Publication on Instructional Leadership and Self-Efficacy

Tiguryera, S., Mugizi, W., & Ssettumba, J. B. (2024). Instructional leadership and self-efficacy of academic staff in public universities in Uganda. *East African Journal of Education Studies*, 7(3), 391-407. DOI: <https://doi.org/10.37284/eajes.7.3.2159>

Study Abstract

The research looked at tangential connections of academic staff efficacy and instructional leadership at four Ugandan public universities. The study specifically looked into how academic staff members' self-efficacy in Ugandan public universities was affected by curriculum coordination, career development, instructional supervision, and student progress tracking. The study's quantitative methodology, which employed a correlational research design, was informed by positivist research philosophy. The teaching staff who provided information via a questionnaire were chosen at random. The results of PLS-SEM showed that, curriculum coordination as well as student progress monitoring were the only two instructional leadership characteristics that influenced teaching self-efficacy. Instructional supervision had a negative and minimal impact on academic teaching self-efficacy, while professional development had a positive but negligible impact. The study discovered that, while professional development and instructional supervision had little impact on teacher self-efficacy, curriculum coordination and student progress tracking were critical. University instructional leaders should place a high priority on efficient curriculum coordination and student progress monitoring to promote efficacy of the academic staff.

Keywords: instruction supervision, curriculum coordination, professional development, monitoring students' progress, instructional leadership, teacher self-efficacy.

Appendix 12: Abstract for the Publication on Self-Efficacy and Teaching Quality

Tiguryera, S., Mugizi, W., & Ssettumba, J. B. (2024). Self-Efficacy and Teaching Quality of Academic Staff in Public Universities in Uganda. <https://doi.org/10.38140/ijms-2024.vol11.08>

Study Abstract:

The research looked into the connection of academic the teaching efficacy of staff and their ability to teach in a few Ugandan public colleges. The study specifically looked at how teaching quality at public institutions was impacted by the efficacy of academic staff members' own feeling of efficacy, behavior management, instructional tactics, and motivational strategies. The study used a correlational research design with a quantitative methodology, following the positivist research ethic. A self-administered questionnaire was utilised to collect data from academic staff members selected at random. According to the findings of partial least squares structural equation modeling (PLS-SEM), only personal sense of effectiveness had a positive and significant impact on teaching quality among the four factors of teacher efficacy. Nonetheless, teaching quality was positively but marginally impacted by the effectiveness of behavior control, instructional tactics, and motivating techniques. It was determined that improving teaching quality requires academic staff members to feel personally effective. However, the effectiveness of academic staff members' behavioral management, teaching, and motivational strategies has had little impact on quality the of university instruction. University administrators should prioritise supporting academics' personal sense of efficacy over the effectiveness of instructional and motivating strategies for improving teaching quality

Keywords: instructional strategies, behaviour management personal sense, motivational strategies, self-efficacy, teaching quality.