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THE EFFECTS OF INTERNAL QUALITTY ASSURANCE STRATEGIES ON STUDENTS' ACADEMIC PERFORMANCE IN THE UNIVERSITY OF YAOUNDE 1

A thesis submitted in partial fulfilment of requirements for the award of a PhD in Curriculum and Evaluation

SPECIALTY: Measurement and Evaluation

PRESENTED BY

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April 2024

DECLARATION

I the undersigned, Magha Protus Songsi, declare that the piece of work entitled 'The Effects of Internal Quality Assurance Strategies on Students' Academic Performance in the University of Yaounde 1' is my original work under the supervision of **Professor Maureen Ebanga Tanyi** conducted under the auspices of The University of Yaounde 1, in partial fulfillment of the requirements for the award of a PhD in Curriculum Studies and Evaluation.

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CERTIFICATION

This is to certify that this work entitled: **The Effects of Internal Quality Assurance Strategies on Students' Academic Performance in the University of Yaounde 1** was carried out by MAGHA PROTUS SONGSI (Registration no 18W6616) under my supervision.

PROFESSOR MAUREEN EBANGA TANYI

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DEDICATION

To my father Bobe Sayong Magha who passed away on the 5th of May 2021. May his soul continue to rest in peace.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

AAU: Association of African Universities

ADEA: Association for the Development of Education in Africa

AfriQAN: African Quality Assurance Network

ANCOVA: Analysis of Covariance

ANOR: National Standards Agency

APA: American Psychological Association

ASG-QA: African Standards and Guidelines for Quality Assurance

AU: African Union

AUC: African Union Commission

BSC: balanced scorecard

BMAS: Benchmark Minimum Academic Standards

BMD: Bachelor –Master –Doctorate

CAT: Computer Adaptive Test

CBT: Computer Based Test

CEMAC: Economic and Monitory Community of Central Africa

CES: Centre for External Studies

CEV: Department of Curriculum and Evaluation

CFA: Conformity factor analysis

CIOMS: International Commission for World Health Organization

CMI: Contextualized Multiple Intelligence

CNAQ: National Quality Assurance Commission

COMS: Department of Computer Science

COMEDAF: Conference of Ministers of Education of Africa

CPIS: Cooperative Instructional Strategy

CTT: Classical Test Theory

CU: Curriculum Unit

DAUQ: Department of University Accreditations and Quality

DID: Department of Subject Didactics

DV: dependent variable

DVC/ICE: Deputy Vice Chancellor in charge of Internal Control and Evaluation

EARNIA: Educational Assessment and Research Network in Africa

EAU: European University Association

EC: European Commission

ECTS: European Credit transfer System

EFE: Department of Fundamental Education

EHEA: European Higher Education Area

ENIC: European Network of Information Centers

ENQA: European Network for Quality Assurance in Higher Education

ESG: European Higher Education Area

EUA: European University Association

EURASHE: European Association of Institutions in Higher Education

ESU: European Students Union

EQAR: European Quality Assurance Register for Higher Education

FALSH: Faculty of Arts, Humanities and Social Sciences

FMBS: Faculty of Medicine and Biomedical Sciences

FS: Faculty of Sciences

FSE: Faculty of Education

GCE: General Certificate of Education

Geo: Department of Geography

GESP: Growth and Employment Strategic Paper

GMAT: Graduate Management Admission Test

GPA: Grade Point Average

GRE: Graduate Record Examination

GRH: General Research hypothesis

GT: Generalizability theory

Ha: Alternative hypothesis

HCT: Human Capital Theory

HE: Higher Education

HEI: Higher Education Institution

His: Department of History

Ho: null hypothesis

HOD: Head of Department

HRM: Human resource management

IAEA: International Association for Educational Assessment

ICET: International Conference on Education Technology

ICT: Information and Communication Technology

IGA: Inspectorate of Academic Affairs

IIQAAPs: Institutional internal quality assurance assessment practices

IJITEE: International Journal of Innovative Technological and Exploring Engineering

IJRISS: International Journal of Research and Innovation in Social science

IMF: International Monetary Fund

IRF: Item response function

IRT: Item Response Theory

IQ: Intelligent Quotient

IQA: Internal Quality Assurance

IV: independent variable

J**AMB:** Joint Admissions and Matriculation Board

LMD : Licence – Master – Doctorat

MCQ: multiple choice questions

MCU: Magna Carta Universtatum

MDGs: Millennium Development Goals

MEd: Department of Educational Management

MINESUP: Ministry of Higher Education

NARIC: National Academic Recognition Information Centers

NCPHE: National commission on Private Higher Education

OMDES: National Observatory of Higher Education Graduates

Phy: Department of Physics

PHQL: Provision of High Quality Leadership

PLS-SEM: Partial Least Square –Structural Equation Modelling

PT: Progress Test

PRT: Peer Review of Teaching

RM: Research Management

SAT: Scholastic Aptitude Test

Soc: Department of Sociology

SPSS: Statistical Package for Social Science

SRH: Specific research hypothesis

SSC: Senior Secondary Certificate

SWOT: Strength, weaknesses, opportunities and threats

TAM: Technology Acceptance Model

TQM: Total Quality Management

TVET: Technical and Vocational Education and Training

UNESCO: United Nations Educational, Scientific and Cultural Organization

USA: United States of America

UTME: Unified Tertiary Matriculation Examination

UY1: University of Yaounde 1

QA: Quality Assurance

QAIs: Quality Assurance Indicators

QAS-TL: Quality Assurance System of Teaching and Learning

QC: Quality control

WAEC: West Africa Examination Council

WASSCE: West African Senior School Certificate Examinations

WWW: World Wide Web

ZJEMAL: Zambia Journal of Educational Management, Administration and Leadership

ABSTRACT

The thrust of this study was to examine the effects of the internal quality assurance strategies on students' academic performance in the University of Yaounde 1. The study was influenced by the realization that the University of Yaounde 1 has for long been witnessing overcrowded classrooms and continuous underperformance of students. So, the key internal quality assurance strategies under consideration were categorized under five broad categories: university human resources management; learning resources and infrastructure; student profile and support services; university pedagogical practices and university assessment practices. Five research questions and hypotheses were postulated. The study was guided by five theories including the total quality management theory, the human capital theory, the Quality Assurance System of Teaching and Learning, the Classical Test theory, the Item Response theory and the Generalizability theory. The research design used for this study was the correlational research design. The researcher used the stratified random sampling and the simple random sampling techniques to draw a sample of 184 Lecturers and a sample of 381 students respectively, from three faculties of the university. Two related self-made questionnaires were used to collect data from the university lecturers and students. Data collected were entered using the Statistical Package of Social Sciences (SPSS) version 21.0 to determine correlation and regression results. Data were analysed using both descriptive and inferential statistics. The descriptive statistics made use of means, median and standard deviation while the inferential statistics made use of Pearson correlation to test whether there was relationship between the two variables. Based on the analysis, the following results were obtained. The university human resources were found to have no significant effect on students' academic performance. Secondly, the university student learning resources and infrastructure showed a significant relation with students' academic performance. Thirdly, findings revealed that student profile and support services had a significant effect on students' academic performance. Fourthly, the university pedagogical practices were found to have a significant effect on students' academic performance and, finally the results revealed a strong relationship between university assessment practices and students' academic performance. The study implied that the university stakeholders should design strategies to ensure quality at every stage of university activity. The study proffers far reaching recommendations to the stakeholders of the University of Yaounde 1 to consider internal quality assurance strategies as the only gateway to the attainment of quality education.

*Key words**: Quality, quality assurance, assessment, strategies, academic performance***

RESUME

L'objectif de cette étude était d'examiner les effets des stratégies d'assurance qualité interne sur les performances académiques des étudiants à l'Université de Yaoundé 1. L'étude a été influencée par la prise de conscience que l'Université de Yaoundé 1 connaît depuis longtemps des salles de classe surpeuplées et une sous-performance des étudiants. Les principales stratégies d'assurance qualité interne à l'étude ont été classées en cinq grandes catégories : ressources humaines universitaires, ressources et infrastructures d'apprentissage, profil des étudiants et services de soutien; pratiques pédagogiques universitaires et pratiques d'évaluation universitaires. Cinq questions et hypothèses de recherche ont été postulées. L'étude a été guidée par cinq théories, dont la théorie de la gestion de la qualité totale, la théorie du capital humain, le système d'assurance qualité de l'enseignement et de l'apprentissage, la théorie du test classique, la théorie de la réponse aux éléments et la théorie de la généralisabilité. Le devis de recherche utilisé pour cette étude était le devis de recherche corrélationnel. Le chercheur a utilisé l'échantillonnage aléatoire stratifié et les techniques d'échantillonnage aléatoire simple pour tirer respectivement un échantillon de 184 professeurs et un échantillon de 381 étudiants, issus de trois facultés de l'université. Deux auto questionnaires ont été utilisés pour recueillir des données auprès des professeurs d'université et des étudiants de l'université. Les données recueillies ont été saisies à l'aide du package statistique des sciences sociales (SPSS) version 21.0 pour déterminer les résultats de corrélation et de régression. Sur la base de l'analyse, les résultats suivants ont été obtenus. Il a été constaté que les stratégies de gestion des ressources humaines de l'université n'avaient aucun effet significatif sur le rendement scolaire des étudiants. Deuxièmement, les ressources et l'infrastructure d'apprentissage des étudiants universitaires ont montré une relation significative avec les résultats scolaires des étudiants. Troisièmement, il a révélé que le profil des étudiants et les services de soutien avaient un effet significatif sur les résultats scolaires des étudiants. Quatrièmement, il a été constaté que les pratiques pédagogiques universitaires ont un effet significatif sur les performances académiques des étudiants et, enfin, les résultats ont révélé une forte relation entre les pratiques d'évaluation universitaires et les performances académiques des étudiants. L'étude impliquait que les acteurs universitaires devraient concevoir des stratégies pour garantir la qualité à chaque étape de l'activité universitaire. L'étude propose des recommandations de grande envergure aux parties prenantes de l'Université de Yaoundé 1 pour qu'elles considèrent les stratégies internes d'assurance qualité comme la seule porte d'entrée vers l'atteinte d'une éducation de qualité.

Mots clés : ***Qualité, assurance qualité, strategies, évaluation, performance académique***

CHAPTER ONE

INTRODUCTION

Background to the Study

The study starts with the background of the study which includes the historical, contextual, conceptual and theoretical backgrounds. These sub themes are discussed in the following paragraphs.

Historical Background to the Study

Here, the historical background and evolution of quality assurance will be examined. Quality Assurance (QA) emerged as a principal business methodology in the Western World throughout the 1950s and early 1960s. Over the past 50 years, business philosophy has placed a strong emphasis on strengthening organizational structures, developing employee problem-solving skills, and maintaining high levels of performance. The foundation of the philosophy was based on adopting a watchdog strategy in public service sectors like health and education, relying on official oversight, professional credentials, internal audits, and more recently, external inspection to uphold standards, eliminate subpar performance, and address issues. Students and society's growing demands for high-quality higher education suggest that higher education institutions (HEIs) are now subject to pressures akin to those that businesses have been dealing with for decades.

Institutional accountability and quality in higher education have their historical roots in the middle ages. Throughout this time, there was a very strong commitment to upholding institutional quality and accountability standards, particularly with regard to program review, evaluation, and assessment. Medieval students established guilds at the same time to safeguard their interests and uphold standards. By collectively placing their professors under bond to adhere to minute rules that guaranteed the students the value of the money paid by each of them as fees, these students held their professors accountable (Charles, 2007). For them, a professor was regarded as being absent from class if he or she could not draw five students to a regular lecture. This made sure that

professors engaged students in their classes. The Professors created their own master guilds to uphold institutional standards and quality as a response to this. In the middle ages, charters were primarily used by Princes and Popes to regulate these institutional standards.

The first universities in Africa were established in the 1820s, including Fourah Bay College in Sierra Leone, which is where the history of quality assurance in higher education in Africa begins. The majority of these universities had partnerships with universities in various colonizing nations, including Britain, France, Spain, and Portugal. Later, in the 1960s, the Cheikh Anta Diop University, now known as the University of Dakar, was regarded as an essential part of the French system of higher education. With affiliation, these universities automatically joined the quality assurance network run by their colonial masters' partner institutions. As a result of the partner universities, the institutions automatically joined the British, French, Portuguese, or other quality assurance systems. The same types of quality control, such as external examiners and other components of these systems, were applied to these institutions as to British or other European universities.

As more universities popped up in Africa, they took on the role of mentors for newer ones like the South African Cape Town University. Mentorship was then seen in the form of grooming which in reality was quality assurance. Now, the majority of these universities maintain institutional autonomy because faculties and governing bodies at each university are now in charge of quality assurance.

Though higher education had more autonomy after African states gained their independence, government agencies and ministries of education developed an interest in university administration. It should be understood that most appointments in most French African territories are influenced by political linings rather than on efficiency. Due to the political rather than merit-based appointments into university management and governing positions, there is a negative impact on university quality. Higher education was given a high degree of centralized government control in some nations, such as Cameroon and Nigeria, while it was granted a lot of autonomy in nations like Ghana and Liberia. Quality control has been more effective in these latter cases than in the earlier ones.

The continuous rise in the student enrollment in universities beginning in the 1990s, economic decline, and austerity in the majority of Africa during that period all contributed to the decline in higher education quality brought on by government interference. The emergence of quality assurance agencies in a small number of African countries was influenced by the decline in quality, the growing internationalization of professions in particular, the recognition of the need to monitor an out-of-control private higher education sector, and a wide range of other concerns about higher education (2020 World Bank Paper no 124).

Prior to 1988, many people did not have interest in academic standards and quality in higher education and saw the increasing awareness of academic quality and standards that was occurring throughout the world unnecessary (Church, 1988). In a similar vein, Harvey and Green (1993) noted that, at the time of writing, quality assurance was seen as self-evident in German higher education. At that time, neither organizations outside of institutions nor organizations inside institutions had a clear role for quality assurance. Academic staff, on the other hand, internalized the system's values and left them out in everything they did. These earlier presumptions are now fading away into a distance.

In fact, during and after the 1990s, the notion that higher education is primarily for the academic elite in many countries has changed in favour of it being a fundamental right for everyone who can benefit from it, as well as a social good. It serves as a crucial pillar of the knowledge economy. Large-scale transformations as a result of this reorientation include the rapid growth in the number of higher education providers and the proliferation of academic disciplines, courses, and programs. The increased entry requirements, adaptable entry pathways, and internationalization have led to an increased in the number of students enrolled in universities. At the same time, government funding for students has a tendency to decline, gradually shifting the cost burden to fee increases and, as appropriate, student loan programs. In addition, it is important to link public funding with performance indicators like student retention and percentage of students who graduate in the shortest amount of time. This will raise the caliber of graduates and, consequently, contribute to the growth of a country.

As a result of the efforts towards quality assurance, between 1991 and 1997, Cameroon, Ghana, Tanzania, and Mauritius established their quality assurance agencies. All of these organizations initially restricted their activities to private university accreditation. For instance, in Cameroon,

the National Commission on Private Higher Education (NCPHE), established in 1991, oversees the process of ensuring quality, but the Minister of Higher Education makes the final determination regarding accreditation. The state universities in particular and higher education in general are largely under the control of the Minister of Higher Education of Cameroon. The Minister does not only has oversight authority over these universities, but he also makes sure that the programs and standards are upheld.

Quality assurance has gradually but steadily emerged as an essential part of higher education worldwide. Since 2003, when the European Ministers of Education made the conscious decision to support the continued development of quality assurance at the institutional, national, and European levels, this trend has been significantly strengthened throughout Europe. This is due to the Bologna process, which was explicitly linked to quality assurance at that time. Additionally, these ministers emphasized the necessity of creating methodologies and standards for quality that are shared by all (Berlin Communiqué, 2003). The establishment of national quality assurance organizations, the adoption of standards and guidelines for quality assurance in the European Higher Education Area (ESG), and the creation of the European Quality Assurance Register for Higher Education (EQAR) were all outcomes of this process at the European level within a few years. The project to create quality assurance model for Europe that are both internal and external have been greatly shaped by ESG in particular.

Traditional approaches to quality assurance have gradually been replaced by contemporary techniques. Traditionally, standards were checked and upheld through external examinations that were given to applicants in the same countries by external organizations. For instance, a colleague from another university who was an expert in the same field of study evaluated his own colleague from another university as part of peer reviews. Another common method for monitoring the quality of instruction and some other aspects of schools generally was inspection. Participants included subject matter experts as well as education experts who assess teaching and other factors and make recommendations for improvement. Currently, secondary education is where this strategy is most frequently used.

Over the past few years, there have been five major changes to quality of higher education in Europe, and in each case, African universities in general and Cameroonian universities in particular have benefited. The Magna Carta Universtatum (MCU), which was signed in 1988 by

over 388 Rectors and Heads of Universities in Europe, maintains that fostering university autonomy is necessary for fostering the ability of universities to adapt to the constantly changing needs of contemporary society (Cheng,2016). After a ministerial meeting at the Sorbonne University in 1998, where it was decided that higher education would play a crucial role in the development of Europe, the European Higher Education Area was created. In 1999, the European Bologna Process improved quality assurance. In order to ensure comparability in standards and quality of higher education qualifications, European nations have come to an agreement known as the Bologna process through a series of ministerial meetings. The European Higher Education Area (EHEA), which is now implemented in 48 states, is defined. The Bologna process resulted in the Bologna declaration, which, among other things outlined the necessity of promoting European collaboration to develop comparable methodologies for quality assurance and standards (Afuh, 2019). The Bologna initiative reaffirmed the European Ministers of Education's commitment to advancing quality assurance at the institutional, national, and European levels and emphasized the need for the creation of standards and methodologies for quality that all parties could agree upon (Berlin Communiqué, 2003).

The 1999 Bologna Declaration’s goals or action points included:

- Improving degree and diploma readability and comparability to boost graduates employability and European HE’s global competitiveness.
- Adopting a higher education system with three cycles, including bachelors, masters and doctoral degrees, or with two main degree cycles: undergraduate and graduate.
- Adopting the European Credit Transfer System (ECTS) which uses credits to promote student mobility and lifelong learning.
- Enhancing freedom of movement for researchers, administrators, teachers and students.
- Promoting European collaboration for quality assurance (QA) to create comparable methodologies and standards.
- Promoting fundamentally European elements in curricula development, inter-institutional collaboration, research and teaching, mobility programs and integrated study programs.

Since one of the goals of the Bologna process was to establish a clear Quality Assurance (QA) and accreditation system, the integration of quality assurance principles into higher education has become a European concern. This move towards integrating QA into higher education has

benefited institutions and students by setting out to achieve a model in the international cooperation in higher education, which improves the quality, transparency and comparability of degrees and studies that have been involved in the process. This effort to integrate QA into higher education have benefited institutions and students. Therefore, it is obvious for the institutions and students, academics, and society that much can be gained by having a recognized quality assurance process at a course, faculty, institutional, and national level.

The Salamanca convention of European higher education institutions established quality as a fundamental requirement for credibility, degree relevance, portability, comparability and attractiveness in 2001. It was also viewed as a fundamental building block of the European higher education area. Similar to how quality was seen as a key factor in determining the competitiveness and allure of European higher education in 2001's Prague communiqué, which was issued by the Ministers of Education in Europe. The Prague communiqué also emphasized the need for ministers to encourage closer coordination between recognition and quality assurance networks by fostering trust and acceptance of respective national QA programs.

A detailed and in-depth discussion within the European context has been made possible by the Prague communiqué's section on quality assurance. The European Network for Quality Assurance in Higher Education (ENQA) steering group created a position paper in 2001 that outlined the network's expectations for a prominent role in developments following Prague. The Prague communiqué makes it clear that ENQA and ENIC/NARIC networks should work to promote assurance of quality and fair degree recognition. The Berlin communiqué, which was signed in 2003, acknowledged, among other things, that quality control should include: a definition of the responsibilities of the bodies and institutions involved; evaluation of programs or institutions, including internal assessment and external review of participation.

Following the proposal made by the European Association for quality Assurance in higher education (ENQA) in collaboration with the European Students Union (ESU), the European Association of Institutions of Higher Education (EURASHE), and the European University Association (EUA), since 2005, Ministers in charge of higher education have adopted the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). Quality assurance and other Bologna action lines, such as qualifications frameworks, recognition, and the promotion of the use of learning outcomes, have all seen significant advancements since

2005. All of these have contributed to a paradigm shift towards student-centered learning and teaching.

According to Chroche and Charlier (2012), the declarations made between 2008 and 2010 prompted the creation of the European Commission (EC) provided funding for a joint project between the European University Association (EUA) and the Association of African Universities (AAU) titled 'Access to Success : Fostering trust and exchange between Europe and Africa.' The Commission of the African Union (AUC), which is responsible for carrying out the African Union (AU) action plan for the continent's second decade of education between 2006 and 2010, began developing a strategy for harmonizing African higher education with the aim of encouraging cooperation in information exchanges. According to Mohamedhai (2013), by 2013, it would be possible to standardize curricula, achieve qualification comparability, and harmonize procedures and policies in order to foster professional academic growth. Additionally, it aimed to make processes that allow higher education systems to effectively interact easier and to reinforce quality within those systems (Woldetensae, 2009).

In order to encourage academic mobility and global understanding, the Arusha convention was adopted by the African ministers of education in December 1981 in Arusha, the capital of Tanzania. The convention's implementation faced some difficulties partly because only 22 states had ratified it by 2002. In 2002, a revision process for the convention was started in cooperation with the Commonwealth of Nations and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). This activity has been ongoing since its inclusion in the African Higher Education Harmonization Strategy, which the Conference of Ministers of Education of Africa (COMEDAF) adopted in 2007. UNESCO and the African Union Commission jointly oversaw the revision process.

Some encouraging actions have been taken in response to criticisms of the Arusha Convention, such as the establishment of the African and Malagasy Council for Higher Education (CAMES), which has been given permission to use the ' License-Master-Doctorat (LMD) approach' in conjunction with the association of African Universities (AAU). The purpose of doing this was to hasten the promotion of mobility and reciprocal recognition of credentials among member nations with significant French-speaking populations. African Economic and Monetary Community of Central Africa (CEMAC) Heads of State made the LMD a political decision (Eta, 2015).

Quality assurance takes different forms in different countries. For example, the United States of America (USA) relies on private accreditation organizations to accredit its institutions. In the Netherlands, peer review is managed by the universities themselves, whereas in the United Kingdom (UK), the Quality Assurance Agency for Higher Education is the organization in charge of quality assurance (Okebukola, 2005). However, because the Netherlands and the UK methods are being used, the situation in Cameroon is complicated. As a result, the ministry of higher education performs quality assurance duties on behalf of the government, and because university administrators seek efficiency, they follow the Dutch model. This model makes accreditation certain and ensures program accreditation. Again, this model uses institutional audits in higher education, ensures program accreditation, and makes accreditation a requirement for receiving public funds. As a developing country that could only rely on these two mechanisms for the accreditation of its universities, Cameroon chose a few components from this model. Therefore, in 1998, the Cameroonian government established the National Advisory Council to oversee and guarantee the quality of its higher education.

The Bologna process, which is a process rather than an event, recommends the use of Total Quality Management (TQM) principles and the adoption of quality assurance procedures as effective ways to address quality issues in higher education. While the majority of African blocs have embraced the Licence-Master-Doctorat (LMD) or Bachelor-Master-Doctorate (BMD) approach, which can only be effective with the application of a robust quality assurance strategies, the Economic and Monetary Community of Central Africa (CEMAC), where Cameroon is an important member country and a signatory to the CEMAC convention, the Heads of States of CEMAC formally adopted the LMD (Eta, 2015). Following that the LMD action lines were established by the Council of CEMAC Ministers in 2006 to include the following:

- Professionalism in educational initiatives
- The establishment of the credit system
- Implementation of two-program system (undergraduate and postgraduate) along with the awarding of the degrees of Bachelor, Master and doctorate
- Adoption of readable certificates that are comparable across national, regional and international borders;
- The ‘semesterisation’ of training sessions (Eta and Vuban, 2017).

The obvious lack of quality assurance among these initial action lines in this situation is extremely concerning. Even with the specific objectives of the Cameroon Ministry of Higher Education on the LMD approach, quality assurance is absent. The Ministry of Higher Education (2007) lists three broad objectives for the LMD approach. In Cameroon's higher education, the LMD approach is in fact intended to:

- Enhance social, cultural and human development by training senior staff members who have a strong sense of civic responsibility; respond to millennium challenges from both the sub regional and national levels in Central Africa;
- Ensure graduate employability and national economic development
- Promote research in collaboration with the private sector to aid outreach.

These are admirable goals, but there is no mechanism to guarantee the effectiveness of their execution. These raise serious questions about the problems that this disregard for higher education may bring about, and consequently, about the academic performance of students at Cameroonian universities, particularly those at the university in question. The Bologna process is a plan for quality control that focusses on solutions that is appropriate for addressing issues with higher education quality, but it is an underutilized option in Cameroonian higher education (Vuban, 2019).

Actually, quality assurance was never implemented as part of the LMD reform at the regional CEMAC level, which had a significant national level impact on Cameroon and prevented the latter from implementing it. However, the LMD/BMD/BMP has been an event rather than a process in Cameroonian higher education, even though the Bologna process has been an ongoing process in Europe, progressing with more ministerial meetings, adopting more action lines, and observing current actions like quality assurance. Otherwise, Cameroon would have been a key component of the ongoing European Bologna process (Vuban, 2019). In light of this, it appears likely that quality assurance methods are inconsistent, occasionally ineffective, or completely absent, thereby impacting on students' academic performance.

Academics and other education experts make up the National Advisory Council. Guidelines for education in Cameroon are a working document created by this organization. These documents, which are managed by a division within the Ministry of Higher Education, contain the minimal

academic standards that are used as the reference material for the accreditation of university programs. According to law no. 98/004 of April 1998, which the President signed on April 14, 1998, the Advisory Council and the Ministry of Higher Education are established entities under the jurisdiction of the government. These two organizations are tasked with ensuring that all programs offered in Cameroonian universities adhere to the prescribed minimum academic standards. The responsibilities of this organ include making sure that all programs are accurate, that they are all accredited and that they have accomplished the intended aims and goals (Aliu, 1998). It should be noted that the document acts as an outside regulatory tool to enhance Cameroon's university standards. It has been updated with Benchmark Minimum Academic Standards (BMAS). A quality assurance feature is professional accreditation.

According to law no 005 of April 16, 2001, on the orientation of Cameroon higher education, the state of Cameroon assigned to higher education the fundamental mission of producing, organizing and disseminating scientific, cultural, professional and ethical knowledge for the purpose of development. In order to ensure and facilitate the implementation of the aforementioned law, the Ministry of Higher Education (MINESUP) accordingly established the Department of University Accreditation and Quality (DAUQ) as a directorate. A Deputy Vice Chancellor for Internal Control and Evaluation or Vice Rector for internal control and Evaluation (VR-CIE) has also been created by the government. In order to fulfill the task given to them by law, Cameroon universities, particularly the University of Yaounde 1, should establish internal quality assurance structures that could streamline strategies for monitoring and evaluating teaching and learning. This is based on the law and subsequent steps taken by the Ministry of Higher Education. All parties involved, including the government, parents, employers, and the general public, expect students to graduate from college on time, with good grades, and equipped with marketable skills.

The government’s emphasis on ensuring that its citizens receive high quality education makes the legal foundations of the quality assurance framework clear in Cameroon. The improvement of learning quality and the adaptation of content to the socioeconomic environment are prioritized in the Cameroonian government's 2012–2020 education and training sector strategy. Due to the strong social demand for more educational facilities brought on by Cameroon's increasing population growth over the years, the nation's system of higher education has experienced a

significant expansion trend over the past three decades. In light of state budget constraints, this expansion has resulted in a rise in the number of private universities and colleges.

Therefore, the legitimacy of conventional quality control structures has been questioned by the public authorities. As a result, the government of Cameroon has made quality assurance one of its top priorities. The Ministry of Higher Education established structures from 2000 to 2018 to manage and assess higher education. The Ministry of Higher Education's (MINESUP) Department of University Accreditations and Quality (DAUQ) is in charge of managing the government-instituted quality assurance system for higher education. The African Standards and Guidelines for Quality Assurance (ASG-QA)'s first external pilot evaluation was based on the department's initial assessment report which it submitted in 2018. The assessment documents recorded advancements in the following areas :

- Tools and recommendations to support internal and external quality assurance processes disseminated to HEI, and based on the best international practices,
- Ongoing, yearly evaluation of educational institutions and initiatives since 2015,
- Putting into action initiatives to foster and embed a culture of continuous improvement and
- Developing an ongoing discussion of the proposed guidelines for the creation of a fully independent quality assurance organization.

According to the aforementioned report, Cameroon's higher education is still concentrating on strengthening its efforts to ensure quality. As a result, they have put in place mechanisms for quality assurance that include internal regulatory systems and university program approval. It implies that in order to be approved, proposals for the creation of new programs must adhere to strict rules. The vice chancellors and rectors of the universities in Cameroon should regularly monitor and review their programs. This will show how successfully a program achieves its stated goals or objectives and the success of the students in achieving the desired results.

Contextual background

The contextual background discusses the context on which the theme of quality assurance is based.

African context

The world is rapidly changing in all dimensions and consequently, higher education is facing many difficulties. The effectiveness of traditional higher education delivery methods has thus been called into question by the government due to the advancements in technology and an increase in student enrollment. The number of students enrolled in higher education worldwide is predicted to rise from just under 100 million in 2000 to 263 million by 2025 (Karaim, 2011). As a result, as enrollment in educational institutions keeps rising, the concern for the quality of education is also escalating. This necessitates the urgent need for some sort of continuous check to ensure that the quality of education should not be compromised in this circumstances and that should be accomplished by establishing quality assurance systems and strategies. To do so, this requires serious investment in education especially in the third world countries like Cameroon.

The African Quality Assurance Network (AfriQAN) was established in 2007 to carry out its mandate of assurance and enhancement of the quality of higher education in Africa through strengthening the work of quality assurance agencies and associated organizations with similar objectives. The effectiveness of quality assurance should therefore always be a top priority at the university level. African Universities Association (AAU) has also taken on a wide range of initiatives, such as the African Higher Education Excellence Award and quality assurance support programs for higher education in Africa, which have greatly bolstered the body of work being done to ensure that the standard of higher education on the continent does not decline.

Efforts were also made to establish the African Framework for Quality Assurance. The objectives of the African quality assurance framework are to promote higher education quality improvements across the continent while establishing minimum standards for quality assurance. In an effort to increase students' mobility between institutions domestically and internationally, there have also been initiatives to adopt credit transfer systems. To do this, they must decide on the required course material, understand what a credit is, and sign a regional credit transfer agreement. The Pan African University (PAU) was proposed for the establishment by the African Union Commission in 2008.

PAU was aimed at promoting programs for networking and development as well as research centers are found in a few African geographic sub-regions' top universities. The organization also aimed to improve the standard of African institutions of higher learning and research, advance science and technology in the continent, speed up information exchange through local, regional, and international networks, including links between academia and industry, and boost systematic intra-African mobility of researchers and students. It aimed to offer examples for boosting the appeal and global competitiveness of higher education in Africa.

In the African higher education sector, quality assurance has become more prevalent. Quality assurance is more common in the higher education sector in Africa. This is determined by the growing number of quality control organizations in Africa. For instance, in Africa, there were only nine national quality assurance agencies in 1990; by 2020 that number had increased to fifty. The success of education and all of its stakeholders, especially students, depends greatly on how seriously quality assurance is taken.

Since it is the corner stone of national development, the government and other education stakeholders should exert every effort to guarantee the standard of higher education, the caliber of the study, instruction, and curriculum will determine how effective this is (Samuel, 2014). This suggests that in order for education to be used as a tool for development, high standards are required. As a result, in order for universities to uphold high academic standards, quality assurance must be seen as a continuous process. There may be both internal and external contributing factors. Academic quality and standards have always been important in higher education, but they have changed over time as different expectations have changed.

Cameroon context

Higher educational institutions' main responsibility is to create services that support the three institutional missions. These consist of teaching, research and public service. Peretomode (2007) describes higher education as the facilitator, the cornerstone, the powerhouse, and the driving force for the strong socioeconomic, political, cultural, healthier, and industrial development of a nation. Higher education institutions are significant mechanisms increasingly recognized as wealth and human capital producing industries. If developing countries are to succeed in a global economy where knowledge is now a crucial competitive advantage, they must continue to invest in this

human capital. The quality of knowledge generated in higher education institutions has a significant impact on the competitiveness of the country. As a result, quality must be given attention through quality assurance techniques.

Cameroon now host over 121 universities including eleven state universities with the most recently created and over 113 private institutions. Private universities in Cameroon are duly accredited by the Ministry of Higher Education (MINESUP) which in principle follows up, controls and evaluates its functioning. Thus, they are placed under the tutelage of MINESUP which in turn delegates this privilege to its state universities by asking them to control the contents and quality of teaching and research of the private institutions and co – sign their certificates. This is essentially to ensure the quality of their activities.

The Cameroon government through its Ministry of Higher Education pays attention on the quality of its education and therefore on quality assurance. This has been done through the creation of instruments within the Ministry aimed at ensuring quality education and employability of graduates. In accordance with article 005 of April 16th, 2001 and Decree No. 2012/433 0f 1st October 2012, under the Ministry of Higher Education, there is a Directorate of University Accreditation and Quality (Sub Directorate of Quality Assurance) that collaborates with National Standards Agency (ANOR), General Inspectorate of Academic Affairs, Directorate of Development of Higher Education and other departments within the ministry's central services. The National Observatory of Higher Education Graduates (OMDES), another organization was established in 2013 with the goal of providing thorough, in-depth and unbiased data on student flows, the rate on integration and job creation for graduates of higher education, among other topics, in order to inform political and social thinking for better decision –making. In order to improve the suitability of training for employment, it also serves as a forum for collaboration and exchanges between institutions and economic actors (Castel-Branco, 2020).

Due to high social demand, Cameroon's higher education system has experienced a significant expansion trend over the past three decades. A rise in the number of primarily private educational institutions has resulted from this expansion. The validity of conventional quality control structures has thus been questioned by the government (Oben, 2021). As a result, quality assurance has elevated to a top priority for the government of Cameroon. As a result, the ministry of higher education established systems for evaluating and monitoring higher education between 2000 and

2018. The department of University Accreditations and Quality (DAUQ) of the Ministry of Higher Education (MINESUP) is in charge of managing the government-instituted quality assurance system for higher education. A report on the department's evaluation, which was the first external pilot evaluation conducted in 2018, was presented. The report (MINESUP, 2017) states that a fully autonomous quality assurance agency is being discussed while a culture of continuous improvement is being created and instilled. Progress has also been made in the instruments and guidelines to support the quality assurance process. In accordance with international practice, the department also created a set of guidelines, benchmarks, and metrics for assessing and guaranteeing the quality of research and education. The need to reinforce internal quality assurance in Cameroon universities cannot be overemphasized because it ensures the quality of teaching and learning and by extension the quality of graduates.

In this project, quality assurance is crucial because it will be the crucial part of the quality control plan for the educational system. It would also aid in monitoring and regulating education, upholding educational standards across the board, and evaluating the quality of teacher input. Quality assurance would help in calculating the necessary number of classrooms based on the average class size in order to ensure the quality control of education and assess the level of sufficiency of the facilities available for quality control. It would also ensure that the financial resources at hand could be used sensibly and prudently. If these concerns are addressed, candidates' academic success will depend on the level of skills they have acquired, and the larger society will gain from their output.

Although each university has its own governing council, the Ministry of Higher Education is responsible for making final decisions regarding university operations (Oben, 2021). These councils are in charge of creating the internal policies of the university, which deal with issues like hiring of new staff, admitting students, and quality control. Any new departments, course modifications, or regulatory changes, however, require approval from the higher education ministry. Given that the public universities are funded by the Cameroonian government, the ministry ensures that they must uphold standards. This implies that decisions pertaining to higher education in Cameroon are still made at the national level, which is likely to present a challenge for the growth of units that provide quality assurance.

Monitoring and supervision are the two main methods through which quality assurance is typically implemented in educational institutions. These two channels allow for the quick detection and correction of minor errors. While supervision focuses on ways to enhance teaching and learning, the monitoring process addresses potential pedagogical issues that may have an impact on teaching and learning (Chiaha and Nane-Ejeh, 2015). Quality control would lead to quality education. In order to promote quality education through internal quality assurance mechanisms, Cameroonian universities in generally and specifically in the university of Yaounde 1 must adopt or intensify strategies and mechanisms. For a major university like Yaoundé 1, the lecturers should have high levels of training, expertise, motivation, and knowledge, and their end products or students should be prepared to operate in a globalized environment.

Internal quality assurance should be more relevant because it focuses on academic endeavour, which is essentially knowledge creation and student learning. The preponderant forms of external quality assurance processes may hijack and mystify quality as a politically motivated, ideologically motivated, ideological, and compliance structures. In order to complement the external quality assurance mechanism, each higher education institution, like the University of Yaounde 1, is expected to develop its own internal quality mechanism that focuses on quality improvement. In this vein, Yorke (1994) suggests that there is a critical need for an enhancement-led approach that relies more heavily on the quality system's capacity for self-regulation and relatively light-handed external monitoring. Jackson (1997) asserts that a self-regulating institution should be capable of auditing its own operations, possess robust internal review and auditing mechanisms, and prioritize self-evaluation within the institution. At the proper level, external peer review should also be done. According to Morris (2003), a university's teaching and learning strategy or institutional quality enhancement plan would serve as the center of a genuine enhancement-led, light-touch method of quality assessment where institutions take on the challenge of self-regulation.

According to Law No. 005 of April 16, 2001, which governs higher education, the state makes sure that it is timely, focused on quality, and continuously modified to meet societal needs. To ensure the relevance, quality, and current standards of its universities, the state should implement quality assurance strategies. The same law created the council for Higher Education, Scientific and Technical Research to assist the state in formulating and implementing its higher education policy. According to Article 10 of the same law, in order to ensure the quality of higher education, the

state shall continuously monitor the implementation of laws and regulations in all areas of higher education, as well as the academic and pedagogical activities of all private educational institutions. In order to foster the culture and practice of evaluation, and to ensure an improvement in the quality, relevance and efficiency of the higher education system, the law makes provision for specific evaluation of Cameroon's higher education programs. Though this law stipulates external quality assurance strategies, which more often than not are hardly implemented, each university has to redefine its specific internal activities to ensure quality.

Higher education now has clear documentation and transparency as a result of quality assurance efforts worldwide. The alignment of external quality processes with regular academic activity could be improved. Internal processes are still being developed, and there is a tenuous and sporadic connection between external processes, internal processes, and improvements in teaching and learning (Harvey, 2010).Quality and relevance, which are defined as improving learning quality and adapting content to socio-economic environment, are prioritized in the Cameroonian education and training sector's 2013 to 2020 strategy (Castel-Branco, 2020). This demonstrates once more how seriously the Cameroonian government takes quality control.

Each university is required to adhere to the quality assurance standards and guidelines that have been released by the Ministry of Higher Education. For instance, the ministry has established university standards that are applicable to all higher education institutions, facilitated the development of a technological and professional component in Cameroonian higher education, defined guidelines for university research in Cameroon, established a national guide for evaluating the performance and comparability of universities, and provided the guide for developing internal quality assurance frameworks by university institutions in Cameroon (MINESUP, 2018)

The Ministry of Higher Education has established quality assurance processes which include evaluation both internal and external, accreditation and registration. All institutions of higher learning are required to establish internal system for performance evaluation, quality assurance and monitoring (Castel-Branco, 2020). The Ministry encountered challenges in its pursuit of effective quality assurance, particularly as a result of a lack of personnel with specialized training in the field and a funding issue, according to the same author. In order to achieve the necessary outcomes for high-quality education, this significant discovery requires an urgent solution.

To assist Higher Education Institutions in organizing, putting into practice and improving quality assurance, MINESUP has created a variety of guidelines, references and standards. The national quality assurance system is required by law, according to Castel –Bianco (2020), consist of the following processes: evaluation, which includes both internal and external evaluation of HEIs; accreditation and registration, which also includes the establishment of HEIs and the development of study cycles or programs leading to the award of degrees and diplomas. According to MINESUP, all higher educational institutions are required to establish internal systems for assessment and quality control and to regularly assess their own performance. Therefore, the ministry is only responsible for external evaluation, which includes the institutional development, institutional management, infrastructure, academic policy, and human resources policy of HEIs.

The Ministry of Higher Education in Cameroon continues to be in charge of quality control in the country's higher education system. The National Standards Agency (ANOR) and the Directorate of University Accreditations and Quality (DAUQ), as was previously stated in MINESUP, are in charge of carrying out the ministry's general accreditation policy. A number of tools supporting the implementation of quality assurance were developed in close collaboration with the General Inspectorate of Academic Affairs (IGA), including the evaluation repository for public universities in 2014, the minimum university standards and course assessment method in 2015, and the specific higher education and research standards in 2016 (Castel-Bianco, 2020). Evaluators have received yearly training to conduct evaluations in institutions that meet the requirements since 2015. The results of these evaluations are not, however, made public by the commissions.

The first pilot external evaluation was based on the self-assessment report that DAUQ of MINESUP presented in 2018. This report took note of the implementation of programs to promote and instill a culture of continuous improvement, the ongoing discussion on the draft guidelines for the establishment of institutions and educational programs, the regular annual evaluation of institutions and educational programs since 2015, and the development of tools and guidelines to support quality assurance processes based on international standards. A set of standards, benchmarks, and metrics for the assessment and quality assurance of research and education has also been developed and disseminated by DAUQ in accordance with international best practices. Despite MINESUP's best efforts to advance quality control, the University of Yaounde 1 has not been able to establish a robust and effective quality assurance cells and has not even encourage all

the faculties to develop theirs. Even though MINESUP has made these essential actions, it is slow in establishing an autonomous quality assurance agency that can ensure transparent and impartial evaluation of higher educational institutional functioning.

The University of Yaounde 1 was created in 1962 after the reunification of the two Cameroons as a Federal university which became the University of Yaoundé in 1973. In 1993, following university reforms the University of Yaounde 1 alongside other state universities were created (decree no 93/026 of 19th January 1993). Pursuant of the provisions of article 2 of the decree no 93/036 of 29 January 1993, the following missions were assigned to the University of Yaoundé 1. The university had as mission to develop and transmit knowledge, develop research and training of men, bring higher forms of culture and research to highest level and correct pace of progress, facilitate access to higher education, and contribute to the support of development, social and cultural promotion as well as to foster bilingualism.

The vision of the University of Yaounde 1 includes reinforcement and professionalization by encouraging the relevance of curricula to meet the labour market demands, attention to produce quality and competitive graduates in the job market, the consolidation of what is already there through the rehabilitation of infrastructure and reinforcement of academic courses of study and research structure, modernization of all elements of the institution and development of cooperation for greater visibility. Based on this, the University has enhanced the creation of quality assurance cells in the Faculty of Arts, Letters and Social Sciences and in the Faculty of Medicine and Biomedical Sciences (MINESUP, 2018). These are expected to ensure internal quality assurance exigencies of these institutions. It may be evident that the principles guiding the creation of these cells might have remained on paper while the absence of these cells in other faculties of the university remain an issue to the quality of higher education in general and the university of Yaounde 1 in particular.

To ensure quality education, the government created the post of Deputy Vice Chancellor or a Vice-Rector in charge of Internal Control and Evaluation DVC/ICE or VRCIE in all state universities including the University of Yaounde 1. He or she assists the Vice Chancellor or Rector in audits, internal controls, evaluates the functioning of the institution, supervises the recruitment of support staff, evaluates and recommends the promotion of teaching staff amongst others. This

is an important practical step to ensure the complete implementation of quality assurance on a continued basis in order to guarantee the quality of their products.

The policy inconsistencies regarding the application of quality control, the ineffectiveness and inefficiency of the few quality assurance cells created at the university of Yaounde 1 is a clear indication that though much has been done in principle, a lot still needs to be done in practice. If quality assurance is so important in higher education as shown in the efforts made in the form of guidelines and setting standards for quality assurance. It means that the lack of quality assurance in our higher education system will negatively affect how they operate and consequently, how their activities turn out. This implies that the lack of effective and efficient checks and balances in the form of quality assurance may have an impact on students, who are the primary actors and beneficiaries of higher education. Quality assurance will provide checks on recruitment and performance of university lecturers, student learning resources and infrastructure, student profiling and support services, university pedagogical practices and assessment practices to ensure continuous improvement. This may in some degree affect the academic performance of students in the university negatively.

The Cameroonian government's unwillingness to establish the National Quality Assurance Commission (CNAQ), a proposal that has been discussed since 2016, demonstrates a lack of understanding of the significance of the quality assurance in higher education once more (Castel-Bianco, 2020). The main objectives of this organization should be to encourage cooperation among all parties involved in higher education and to put plans in place to improve academic standards at each institution. Even though it will be overseen by the Ministry of Higher Education, its establishment would have been a step in the right direction toward enforcing quality assurance in Cameroon's higher education system. Students' academic performance may be impacted by the lack of an independent quality assurance agency that could independently review unethical behavior in universities.

The University of Yaounde 1 is a leading university in Cameroon and the 31st in Africa following the US News and World report (2022) on the 2022 ranking of African universities. By extension therefore, the top university in French West and central Africa is the University of Yaounde 1. Considering this fact, the university should make an effort in maintaining or improving its standards. This means that the university has been making an effort to maintain standards but that

much still needs to be done to be elevated to a better position. The University of Yaounde 1 has engaged in developing and transmitting knowledge by a highly qualified teaching staff which helps to maintain a high level of quality teaching and learning. The University of Yaounde 1 has been making efforts towards maintaining the quality of the services they offer so as to produce quality products but these efforts are seemingly falling below expectations and the general performances of its students have been barely on the average. For example, according to Amin (2009) cited in Wirngo (2013) in a study on assessing students in higher education, reveals that there is high repetition rate of 40%, failure rate has been at 41%, a low pass rate of 25% and an overall pass of 59% in the end of course examinations in the university. Wirngo (2013) further posits that most graduates from the tertiary education sector possess certificates that attest their knowledge in university programs whereas in reality their know – how and competences do not reflect the claims in their real life application.

Conceptual background to the study

This sub section focuses on the conceptual background of the study. The background uses key concepts which inform the focus of the research. Here, the key concepts relevant to the study shall be synoptically presented, identifying the connection to one another. Again, the independent variable is characterized by university human resources, university learning resources and infrastructure, student profile and support services, university lecturers' pedagogic practices and university assessment practices.

Quality in education

Quality simply means standard, fit for use or something of class. As an adjective the word quality is used to describe that something is well made, being of good worth or fit for purpose. Quality is how good something is. If the quality of a product is high then that means that it is fit for its purpose. If a product's quality is poor, it may not function properly or may break down easily. Quality can be perceived as high or low. High quality, for instance, can be excellent, best, first-rate, or superior. The product in education is the student. Since quality refers to a subtle but noticeable difference between two things, it is difficult to define. To evaluate quality, relative terms like "better," "superior," and "acceptable" are frequently used. Customers will often choose to buy products from businesses that uphold quality standards over competing ones based only on

the information that has been passed about the product. The philosophy of quality assurance in business and the public sector, however, differs (Charles, 2007)).

Different stakeholders may have different definitions of quality. For instance, in higher education, funding organizations, students, lecturers, administrators, and consumers of the output of higher education, such as employers, may have varying perspectives and interests regarding quality. The suitability of a thing for a specific purpose, compliance with specifications. It is the totality of its features that affect its ability both explicit and implicit needs (Thareja 2017). According to Lomas (2001), the definitions of quality as fitness for purpose and quality's transformation seem to be more applicable for higher education. The situation in which a group of innate qualities consistently meets the stakeholders' and the organization's customers' ever-changing requirements can also be referred to as quality (Ibrahim, 2012).

Only high-quality education can develop a person’s mind and contribute to the economic, social and political transformation of a society. To achieve sustainable development, nations can increase the human capital's skill set through higher education training. Higher level man power training is a crucial tool for promoting national development. Citizens who have access to such high-quality education can learn techniques and skills that increase output, creativity, innovation, and inventiveness (Ehiametalor, 1988). Due to the importance of higher education, its quality must receive great attention; therefore, quality assurance must be treated as a secondary concern in all activities pertaining to higher education.

According to Uvah (2005), the quality of university graduates can be determined by how well they were prepared for life and to serve the society in a variety of fields of endeavour. It can also mean how the graduates can solve societal daily problems and difficulties. If graduates are unable to fit well in the society or are unable to solve even their problems and those of the society, then there a problem with the quality of education. Along with job performance in businesses and institutions, it can also be determined by how many graduates enroll in highly regarded foreign universities.

High-quality education has certain traits. The following must be present for any educational institution to claim that it is offering high-quality education. These consist of excellent students, an excellent learning environment, excellent content, an excellent workflow, and excellent results (Eze, 2009). A school must enroll the best possible students if it is to live up to expectations. This

necessitates students who are capable, motivated, and supported by their families. The setting in which students learn is another element of high-quality instruction. The learning environment must be safe, inclusive, sensitive to gender, supportive of good health, and equipped with enough materials and facilities. There cannot be any violence, and psychosocial factors must promote learning. High-quality content is the third attribute of a quality education. This refers to the curriculum that is intended for and taught in schools, which must be student-centered, inclusive, and standard-based. The content should be unique in terms of local and national levels and should lay emphasis on life skills and peace education. The fourth feature is quality processes are important in ensuring quality in education. This is because quality processes lead to quality outcome. Processes through which trained teachers use child centred teaching approaches in well managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities.

The final component of high quality education is the quality outcome, which includes acquired knowledge, abilities and attitudes that are connected to national goals for education and useful participation in society. The cornerstones of a quality education are, in summary, a quality curriculum, quality resources, quality leaders, quality parents, and quality teachers. Quality teachers can transform the curriculum into fruitful learning experiences if they are supported by quality leaders who offer quality resources and curriculum. Because of their parents' unwavering support and access to quality resources, students who are quality learners are those who are in good physical, social, and mental health.

Figure 1: Elements of quality education

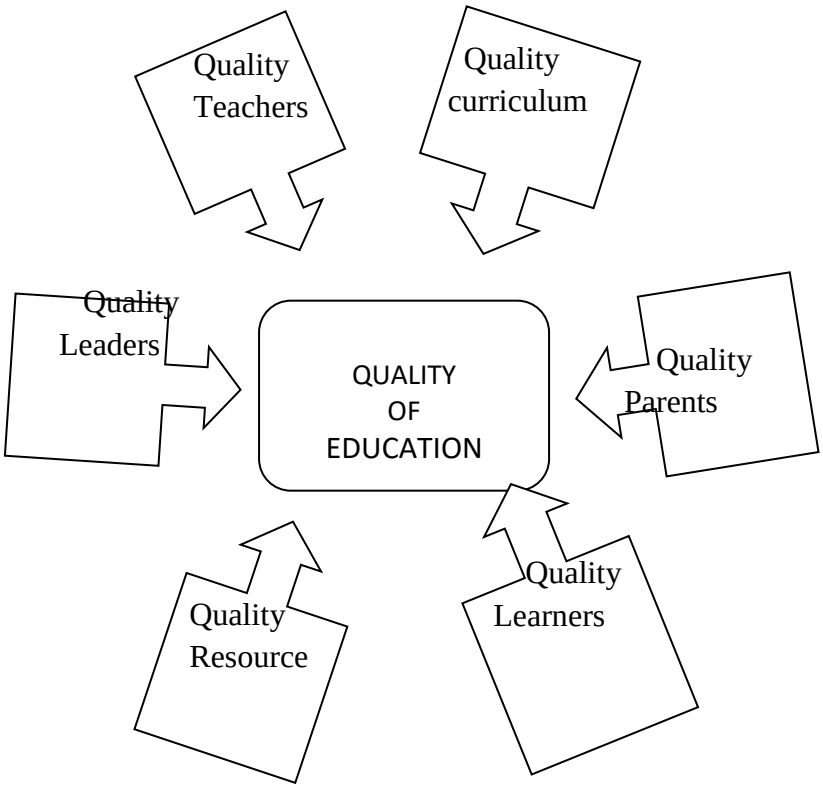


Figure 1 shows the basic and important elements that contribute to quality in education. If any of the elements is absent or inadequate then quality education cannot be attained, therefore, effort must be made at all times to ensure that these elements are available. Quality leaders include all educational stakeholders, quality resources include learning resources and infrastructures, quality learners refer to students, quality teachers refer to refined teaching staff and quality parents who are ready to play a quality role in the education of their children.

It is the quality of a higher educational institution or it is the quality of a university or tertiary institution that influences its international ranking. University rankings have gained importance around the world today. However, most of the best universities of the world are found in the USA while some are found in Europe. According to Pavel (2012), thirteen different performance indicators – including teaching, research and knowledge transfer are used to rank the top universities in the world. These indicators are meant to represent the full range of university activities. These 13 indicators are divided into five major categories: teaching, research, citations, industry income, and global outlook. Higher education should prioritize these crucial areas in order

to guarantee high standards for instruction and promote national development. Therefore, any university that wants to improve the quality of its education should take into account the quality attributes, components, and indicators listed above. The University of Yaounde 1 should make an effort to improve its quality in these dimensions, so as to promote the development of Cameroon, attain the objectives for which it was created and improve on its international ranking.

Quality assurance (QA) in Higher education

Quality assurance simply means steps to ensure that quality is maintained. Quality assurance (QA) in other words mean cross checking, vetting, survey or review. In existing literature, quality assurance, quality assessment, quality development and quality improvement is often used synonymously. In order to guarantee the creation of high - quality outputs and the advancement of quality institutions and systems of higher education employ systematic management and assessment procedures (Harman and Meek, 2000). Materu (2007) lists a number of factors that contribute to the need for stronger systems for ensuring the quality of higher education in Africa, including: growing demand for higher education and rising private contributions; rapid growth in higher education enrollment in Africa without corresponding increases in funding; demands for increased transparency and accountability; and expanding regional collaboration that necessitates harmonization of dual standards. The practices, processes, and policies of external and internal methods are used by the QA system to monitor the quality of higher education.

According to Fadokun (2005), quality assurance is the process of critically evaluating goals, attitudes, practices, and institutional control systems to make sure that predetermined standards and levels of quality are upheld. Increasing the effectiveness of the educational system in meeting predetermined standards is the aim of quality assurance (Onyesom and Ashibogwu, 2013). Quality assurance, in accordance with Chiaha and Nane-Ejeh (2015), is concerned with the adoption of trustworthy practices that will ultimately be applied to produce quality in the educational systems.

Assuring the consistency of every good or service sold under a company's name has made quality assurance crucial in the business world, but it is now equally crucial in the fields of education and other public services across the globe. The most crucial factor that gives the recipient of the product or service value is quality. Additionally, it is a strategy used by companies or service providers to set themselves apart from rivals. Since businesses are recognized as industry leaders in quality

control, non - profit organizations like educational institutions can benefit from their experience and ensure that their goods (students) are valued by their customers (employers) and society at large.

Quality Assurance (QA) is important in education in that it can provide stakeholders such as students, potential students, administration and the rest of the society, in particular, with information that will be useful to them in making decisions about programs and qualifications in different countries. If co-ordination and communication could be achieved between QA and recognition, they could together provide a powerful source of useful information about institutions and qualifications, which would be great benefit to a wide range of stakeholder.

Therefore, the ultimate aim of quality assurance in education is to ensure that learners have the best learning opportunities possible to achieve best outcomes. Therefore, the topic of higher education quality assurance needs to be globalized because a graduate of one university might have to work at another university or in an industrial setting in a different culture. This shows that quality assurance in education should be the concern of the whole world at large.

In terms of criteria or standards for quality assurance, there are also commodities. There are some nations where the standards for quality assurance include elements of the educational process like curricula, teaching and learning, and student evaluation. As a result, a wider range of educational concerns are raised, including those relating to the goal of education, the ways in which educational institutions serve society, and who makes these decisions, as well as the intricate processes of teaching and learning, their evaluation, and the development of staff members' knowledge, skills, and competences in order to improve their performance as teachers. And then, the important question of the quality of the educational products which are the students.

The following are few instances of typical quality assurance methods or tools that are crucial in ensuring the caliber of products for higher education. One typical strategy is the design of a curriculum or needs assessment program. Regular program or curriculum reviews, evaluation of learning outcomes, consultation with key stakeholders, institutional self-assessment procedures, hiring of services of external examiners, conducting alumni surveys and exit interviews with prospective graduates, and establishing procedures for coworker and student evaluations of

teaching, and implementing the SWOT (strengths, weaknesses, opportunities and threats) analysis are all ways to go about it.

This research entitled “Internal Quality Assurance Strategies and its Effects on Students’ Academic Performance in the University of Yaounde 1” was designed to examine the internal quality assurance strategies of the university of Yaounde 1 and their consequent effects on the academic performance of students in the university. This study was aimed at examining the effects of the university internal quality assurance strategies on students’ academic performance. This was basically to understand whether students’ academic achievement is affected by the absence of internal quality assurance strategies especially in the aspects of university human resources, student learning resources and infrastructure, student profile and support services, university pedagogical and assessment practices. This emanates from the observation that the success rates at the university has been just average while the repetition rate was also relatively high, with the Faculty of Science being the highest with low success rate and high repetition rate.

Internal quality assurance in education

These are internal strategies aimed at ensuring the achievement of institutional quality. Internal quality assurance means internal quality control, or institutional control, internal supervision or internal inspection. That means the efforts in assuring that quality is maintained from within. Monitoring the teaching, learning and assessment processes that a learner engages at a learning provider is also known as internal quality assurance. Internal quality assurance refers to the processes and checks that institutions or programs in higher education use to make sure they are carrying out their missions and abiding by standards that are relevant to higher education in general or to a specific profession or discipline in particular (Parri, 2006). According to Boyd and Fresen (2004), internal quality assurance is essential because it could result in ongoing improvement. Higher education institutions use internal quality assurance, which covers things like admission criteria, teacher evaluation and assessment processes, program analysis, examination fairness, and rules and regulations. (Bill, 2010).

Internal quality control is concerned on the educational inputs, procedures, and results in relation to student learning. Student learning is the main outcome of any educational activity. Inputs into education include the creation, endorsement, and evaluation of curricula, instruction, and learning,

quantity and quality of academic staff, the preparedness of new students, and the availability of resources like information, cash and physical assets, student assessment, and the quality and use of resources are all included in the educational process. Graduates and professional services are the two main educational outcomes.

There are internal quality assurance mechanisms to ensure quality. Internal quality assurance mechanisms or strategies can be classified into three categories including school self-evaluation, staff appraisal and classroom – based student assessment. It is important to increase the capacity of school administrators and teachers as well as their ability to study other industries that regularly conduct internal monitoring and when necessary, develop tools. Staff appraisal includes hiring new employees as well as self and peer reviews and student evaluations of the staff. Last but not least, classroom-based student assessments include teaching, learning, and assessment practices. Academic content, teaching and learning techniques, and assessment tools are all common components of the quality assurance programs in each of the nations under consideration. Additionally, some countries, like the United States of America and the United Kingdom, emphasize the mission of the institution, institutional organization and management (Norway and India), student recruitment and admission (USA, Uk and Kenya).

External quality assurance

This implies external mechanisms or actions used to ensure that institutional objectives are attained to the fullest. The phrase “external quality assurance” refers to various activities carried out at the institutional and or program level by organisations outside of higher education institutions. External quality assurance also means external control. To evaluate the degree of adherence, predetermined standards, an external agency, such as a national quality organization, a professional organization, or an accrediting body, reviews a university's operations and its programs (Okae-Adjei, 2016). An accreditation procedure is used, which includes a self-study, peer reviews by a panel of professionals, and a reporting system. According to Parri (2006), an external quality assurance is necessary to show that the institution's goals are met. The external system of quality control aids and supports internal procedures. According to Bill (2010), there are different types of external quality assurance, including accreditation, auditing, and assessment.

Although some people view external quality assurance practices as imposition and prescription, bureaucratic practices that are out of step with academic endeavour and such practices have a negative impact on individual and organizational behaviour, there are benefits of external quality assurance, such as increased transparency in decision-making and improved teaching and learning quality.

Assessment

To develop a thorough understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences, assessment is a process of gathering and discussing information from numerous and diverse sources. When assessment results are put to use to enhance learning, the process is finished. The term 'assessment' refers to the wide range of techniques or resources that educators employ to assess and record their students' academic readiness, growth as learners, educational needs and acquisition of new skills. To enhance the learning and growth of students, Coverdale et al. (2013) define assessment as the systematic collection, review, and use of data about educational programs. Assessment is carried out to see what students or learners have learned, understand and are able to do. Assessment practices imply test development or the construction of a test, item banking procedures for future random use, the actual test administration procedures, scoring or marking practices and proclamation of results.

For assessment to be effective all educators should demonstrate that they are assessing skills and competencies necessary and relevant to the course taken. Assessment should be able to bring out from the learners the three critical educational elements which are worthwhile skills, appropriate attitudes and applicable knowledge which make up competencies and all of which are acquired through teaching.

Academic Performance

Simply put, academic performance refers to how well a student has performed in their various academic subjects. It is usually associated to the evaluation test results which are those corresponding to the students intelligent quotient (IQ). Academic performance is defined by Narad and Abdullah (2016) as the knowledge acquired and evaluated by a teacher using grades or educational objectives set by students and teachers to be achieved over a predetermined period of time. Academic performance is influenced by how hard students study for exams. Academic

performance is what a student is capable of after being taught. It refers to how well a student meets the goals set in a learning environment. This implies that academic performance is determined after the student has been taught specific courses of academic studies or curriculum. Academic performance is often measured using classroom performance, graduation rates and results from standardized tests. Student performance is often measured in the university by the overall average score and the average scores from the previous semesters or grade point average (GPA). Any student who scores a mark below 10 or less than 50% in an examination is usually considered as a failed case. This means that such a candidate has failed in the course.

Internal Quality Assurance Strategies

Internal quality assurance is a concept of interest in the study and has sub- variables that shall also be highlighted below. For any university to achieve the objectives for which it was created and to act as an effective engine for the development of the country, it must put in place visible and effective internal quality assurance strategies aimed at maintaining and sustaining the quality of its services and products. These strategies complement external quality assurance plans and are more results-oriented. The Standards and Guidelines for Quality Assurance for European Higher Education Area (ESG), the characteristics of internal quality assurance, the steps to quality assurance (Babalola, 2004), and the indicators of quality assurance (UNESCO, 2002) can all be taken into consideration when deciding on key internal quality assurance strategies. These strategies rely on vital university operational elements like human resources, infrastructure, and learning resources, student profiling, support services, teaching and learning, as well as assessment and evaluation procedures. The discussions that follow will carefully highlight these sub variables under internal quality assurance strategies.

University Human Resources

According to Rudzka (2018), the university like any organization, largely depends on the people who work there, on their competence, dedication and motivation to carry out their mission, goals and tasks. By university human resources here, this researcher refers to the university human resources management, support staff and teaching staff. The university's greatest asset is its staff and therefore, the source of the human resources required to create a competitive advantage. Their level of workplace happiness influences academic performance, the standard of educational

services provided and the caliber of scientific research. (Ryca, 2014). Therefore, the university should establish efficient processes for hiring, keeping, and promoting its staff. Any university's human resources are still its most important asset because they ensure that its operations produce high-quality results. The university needs to set up a human resource management system that takes into account the three main human resource processes of people entering the institution, using its services, and leaving it (Pocztowski, 2008). For a university to have quality staff, it must have effective and transparent teacher recruitment procedures. Therefore, those recruited should be the most qualified and experienced teachers and every effort should be made to ensure that they remain effectively efficient. If this process is ignored, teaching learning process would be affected and consequently the students' academic performance would be affected.

There should be clear modalities on how teachers are recruited into the university, whether they are recruited by studying documents, through an interview or other transparent methods. Each group of university employees, including the academic, administrative and technical staff should be taken into account when creating an employment plan. This would remove possibilities of favouritism and corrupt practices during the recruitment processes. Therefore, only the best teachers will be recruited to teach effectively for the good understanding and performance of students. The recruitment of academic staff is based on competitions for posts. Recruitment ought to be strategic and based on very strict criteria. In the Charter and the Code, the European Commission urges the use of clear recruitment standards, efficient, transparent hiring practices tailored to the nature of the position being offered; detailed disclosure of employment conditions and hiring outcomes, including of those who were rejected for the position; and consideration of candidates' varied backgrounds and experiences in addition to national and international mobility (The European Charter, 2005). Recruitment must be void of any form of discrimination, so as to provide employees with the opportunity to develop a research career in the long term perspective.

Quality can be also maintained, if the university administration develops effective teacher retention strategies, provides support for staff development, creates a system that recognizes and rewards good staff performance, establishes effective transparent grievance redressal procedures and ensures that staff workloads are appropriate to allow for effective research and follow up of each student. The development of new competencies for promotion, redeployment and organizational change, as well as the advancement of academic teacher's knowledge are required for them to

effectively perform in their current roles. Academic teachers must follow a very formal career path, which is governed by the law and university statutes. Participation in postgraduate studies, conferences, seminars, symposia, training trips and national and international grants are additional methods for training research and teaching staff.

Teachers should be motivated to work. Academic teacher motivation has both tangible and intangible component. The first consists of fixed compensation that is subject to rules and regulations, as well as additional compensation that is appropriate at a particular university, like bonuses and social benefits. At every stage of their careers, researchers should be provided with favorable and equitable financial and social security conditions, according to both the European Charter and the Code of the European Commission (The European Charter, 2005). The examples of intangible incentives include the prestige of working for a university, a feeling of security and stability, autonomy, freedom of action and independence, delegation of power, personal development, participation in conferences and seminars, learning a new language, flexible work schedules and opportunity to instruct classes based on original research. All of these would encourage teachers to perform their duties well, which would impact their instruction and students' comprehension. In the same line of action, internal appointments and promotion within the university should be done following performance, experience and qualification. This will be motivating and encourage hard work in view of future promotion, the absence of which could affect the performance of students.

Staff recruitment, retention and promotion in the University of Yaounde 1 might put quality into question especially as procedures are not usually made available to the larger public. In some cases politics may be allowed to play into the implementation of these very essential components of university activities and more than not compromise quality. Again the university should assist by sponsoring lecturers' participation in national and international workshops and seminars. This would help in building their capacities and give the opportunities to create academic networks with other lecturers around the world through which they can share knowledge on common subject areas. These can improve their output and teaching – learning process.

University Learning Resources and Infrastructure

With quality assurance, an extensive approach to university teaching materials is recommended by experts, taking into account all the resources that support the entire educational process to develop and train students' skills. The term educational resources refer to all the human, material, and audiovisual resources that the academic community has at its disposal to support administration and instruction (Usman. 2016). Materials used in higher education are tools for delivering course content and achieving educational goals. Learning resources are all the equipment and setups that facilitate teaching and learning. These include but are not limited to accessible lecture halls, labs, computing facilities, libraries, microphones, white chalkboards, and all other didactic materials. The university should provide adequate, effective, and efficient infrastructure and learning resources in order to ensure the quality of its services and products (students). In light of this, every effort should be made to provide adequate and accessible lecture halls and laboratories commensurate with the level of instruction. This will allow the students to feel comfortable and study well in their classes for better results. Since most universities are going digital especially as a consequence of the outbreak of covid 19, they should provide computing facilities matching demands and number of students.

Apart from these, library and sports facilities, friendly learning spaces and health services should be provided or made to be up to standards. To ensure effective lesson delivery, statutory class sizes should be maintained and therefore, each university should have maximum number of new admissions each academic year. In follow up of this, each classroom should be equipped with microphones, whiteboards or chalkboards amongst other relevant equipment. It is evident that large class sizes and absence of didactic materials would affect the students' performance negatively. Learning goes with many challenges and therefore each university should establish internal counselling services to carter for students' daily problems. Counselling would rekindle hope in students that were already losing it as well as redirect students who were going wayward for one reason or the other. This would surely lead to an improvement in their performance. The university also needs to provide learning facilities to lecturers in order to make them comfortable to carry out his pedagogic functions well.

In order to overcome the rigid structure of the university- focused on teaching process and tip the scales in favour of the learning process which is important in student training and so university

materials are used as educational resources and infrastructure (Iru, 2021). The teaching materials must be viewed as resources in the student's learning, giving him the opportunity to even personalize the learning process through the help provided and his ongoing involvement. They could support the effectiveness of teaching and learning as well as assessment methods and techniques by assisting students in setting their learning objectives, engaging them, and providing them with various levels of curriculum content experimentation. They could increase the efficiency of instructional time, keep instructional time balanced, and develop a thorough understanding of course material (Mincu and Desire, 2015).

The university should make sure that the tools offered to support student learning are sufficient and suitable for each program it offers. The University of Yaounde 1 is making an effort in this line of action to ensure the quality of its services and products but most of it is more in principle than in practice. The university lecture halls are grossly inadequate sometimes with class sizes that compromise quality and affect the teaching and learning process. The university libraries are poorly equipped and not to standards and below expectation. It is not easy to find a textbook in the library, therefore students have to rely only on lectures or to search elsewhere for sources of information. Computing facilities and learning spaces are inadequate compared to student demands and there is no regular supply of internet in the campus.

Student Profiles and Support Services

The effectiveness of student support services and student profiles are important factors in the teaching and learning processes. Because higher education has its roots in the medieval European group, Gillispie (2003) explains that educational counseling has historically been a part of teachers' duties and has focused on students' overall development. Academic staff members help students with their academic decisions, issues relating to their instruction, and issues relating to their studies, according to Morgan (2012). These services are provided at the departmental, faculty, or study program levels.

This means qualification of prospective students of the University, availability of scholarships to students, student representation in university academic decision making bodies for the institution to understand their difficulties and availability of student counselling services. The university should establish a well-defined system of student profiling and support services. Here, university

authorities should establish transparent admission procedures wherein only the best students are admitted. This would obviously encourage hard work rather than mediocrity at the Advanced Levels or Baccalaureate for students wishing to attend university from Cameroon for example. In this way, prospective students must have a certain upper grade before they are admitted into the university, faculty or department. Therefore, students must have certain specific qualifications to be admitted into some faculties or departments. With this, hard work will be encouraged even at the advanced level and this would continue through the university, hence they will continue to perform well academically.

To ensure quality, the university authorities should make available merit based scholarships and fellowships for its students on a consistent bases. This will encourage hard work at all levels in the university. This will result to an improvement in students' academic performance. Each faculty or department should also have a regular programmed sessions with students during which they are oriented, counselled and advised on academic issues. Quality in university can be assured when students are represented in academic decision making bodies of the university at all times and at all levels. In this direction, there should be provision for students to make complaints and academic appeals regularly and when need arises. Students' concerns should also be given due and prompt considerations by the administration. Discrimination on campus should not be tolerated by the authorities so that students should feel valued and safe. These would institute a sense of fairness and assiduity amongst the students and will lead to improvement in their output. To promote a fair, balanced and comfortable learning environment, student unions should be given to opportunity to function freely to be able to play a key role in addressing students' academic problems.

The University of Yaounde 1 does not have stringent admission policies as it admits every student that had the Advanced level or Baccalaureate certificate with the relevant number of passed papers. Apart from the annual Presidential grant of 50.000 francs CFA for the best students, the University of Yaounde 1 does not provide regular scholarship opportunities to promote hard work, competition among students and promote quality.

University Teaching and Learning (University pedagogical practices)

Tendongmoh (2021) cites Andrew (2017) as saying that while pedagogy and didactics, which include the strategies and justified approaches to subject teaching and learning, may vary by

subject, they will invariably take into account the order and coherence of ideas. The university's methods of teaching and learning are referred to as pedagogy in this context. Making an efficient system for the university administration to ensure effective teaching and learning is another internal quality assurance strategy. Every university's attention, resources, and resources should be directed toward the teaching and learning process. Therefore, each university should put all of its effort into both the admission of the best students and the hiring of the best teachers. Quality can be maintained or improved upon if provisions are made for senior colleagues to oversee or supervise the teaching process of a junior colleague and to make observations and advice at the end of the lesson delivery where necessary. Also, student evaluation of their teachers though challenging can also promote the teaching - learning process. When feedback is prompt, students are motivated to work hard and consequently perform well.

There should be quality assurance of teaching staff. Institutions should have ways of satisfying themselves that staffs involved with the teaching of students are qualified and competent to do so. They should be available to those undertaking external reviews and commented upon reports. The University of Yaounde 1 has over the years been engaged in a fervent effort to maintain standards with regards to its pedagogical responsibility and to fulfil its academic mission of research, teaching and service. However, what is observed in the University Yaounde 1 is the absence of selection in admission procedures of prospective students into the undergraduate programs and inconsistent policy on recruitment of lecturers. Again, teaching is done without supervision and there is no opportunity for peer review or for a senior colleague to observe a junior colleague and make recommendations. This allows teaching to be done at the whims and caprices of the lecturers. So teaching is not necessarily student centred and may influence the students' academic performance negatively.

The university's attempt to engage in digital education whereby the use of virtual classes is promoted has registered setbacks because majority of Cameroonian students are poor. Virtual classes allow for a teacher to deposit his course in an internal email address, known to the students of that level. The students access the documents, download them and study. They can also ask questions through this channel and get answers from the teachers. Students who miss classes can attend them here. This has seemingly proven ineffective because most of the students are poor and consequently unable to afford computers and even data to use internet. Even with the provision of

low grade computers by the President of the Republic has not entirely addressed the issues that students face when using information and communication technology.

University Assessment Practices

The next strategy for internal quality assurance is the establishment of mechanisms to ensure best assessment and evaluation practices within the university. This is an important component of teaching and learning because if well implemented it will promote learning and more so because it is an integral part of instruction, it determines whether or not the goals of education are met. In any educational system, assessment determines how well students have mastered the subject matter and how well educational learning outcomes have been attained. Teachers can determine through assessment whether or not students are developing the desired competencies and values, whether the curriculum impacts the required knowledge and skills for the discipline and whether or not students can integrate their learning from individual courses into comprehensive educational experience that will prepare them for future careers (Adedoyin, 2016).It influences choices regarding the curriculum, instructional needs, placement, and advancement. Errors in assessment and evaluation can be misleading with disastrous consequences on educational decisions and policies. For this to be effectively carried out, it must agree with the principles of reliability and validity.

Black and William(2004) identified three main issues with assessment practices in higher education institutions, including the fact that the methods used by instructors to gauge student learning are ineffective; grading procedures frequently place more emphasis on competition than on self-improvement; and assessment feedback, when it does exist, frequently has a negative impact, especially on students with low test scores who are made to feel as though they lack ability and are as a result, treated favourably. Therefore, university lecturers should be trained on educational measurement and evaluation with a particular attention on test development practices including fair, transparent and balanced scoring practices, grading and effective feedback processes. With the knowledge, all test or examinations within the university should be representative samples of subject domains, valid and reliable. Each department should have a panel that do proof reading of items, item review and moderation of items before test administration. Once the items are moderated they should be kept in a departmental item bank for eventual random use. This would remove all possibilities of leakages and examination misconduct. The quality of

the examinations would be maintained if they are written in spacious, less crowded halls else the aim of assessment would be compromised. Instructions on the examination papers should be clear with unambiguous language, and there should always be the English and French versions of the examination so that each student should write in his or her best language. After writing the examination, the scoring practices should be well defined and carried out fairly and following standards. Each department should establish feedback mechanisms that are effective and prompt with a grading system that meet international standards. These would mean that students' academic performance will reflect their body of learned knowledge and their true score.

In the University of Yaounde 1, one observes that the test development practices of the university lecturers are neglected by the authorities and this may have negative consequences for students' academic performance. Before each test, students are frequently not required to comprehend the various types of thinking and reasoning and there is no room where departmental panels develop items for future testing which are moderated, proofread and review before eventual administration. This allows for lecturers to present items to students during examination with unclear instructions and ambiguous language. Each lecturer presents his items in his best language without a translated version which might present a difficulty to candidates who are still getting acquainted to their second language for the first time. There are no faculty or departmental item banks in the university where items are kept after moderation for future random use. More often than not in the university, lecturers' tests are not a representative sample of the subject domains and this may favour and disfavour some students leading to poor judgement and conclusions. Even more so, there is often no clarity in assessment and marking criteria and there is no assurance that the scoring practices are transparent and accurate. All these may affect students' academic performance.

To solve the problem of the ever increasing population of the University of Yaounde 1, it has engaged in the use of tele-evaluation as a mechanism for evaluating students at the university using digital means such as remote controls, computers and mcqs (multiple choice questions). This has been an internal quality assurance strategy to ensure quality assessment practices in a way that should not affect students negatively. However, this has proven ineffective because many students do not have the required equipment to meet with this innovation.

For assessment to be effective, reliable and valid, it should measure not only what it intends to measure, but it should be consistent. Therefore, the assumption is that if the educator is assessing

what he or she taught, there should not be many students failing in that course. If many students fail in a course, then the assessment tools used need to be investigated. This can only be done by a quality assurance cell.

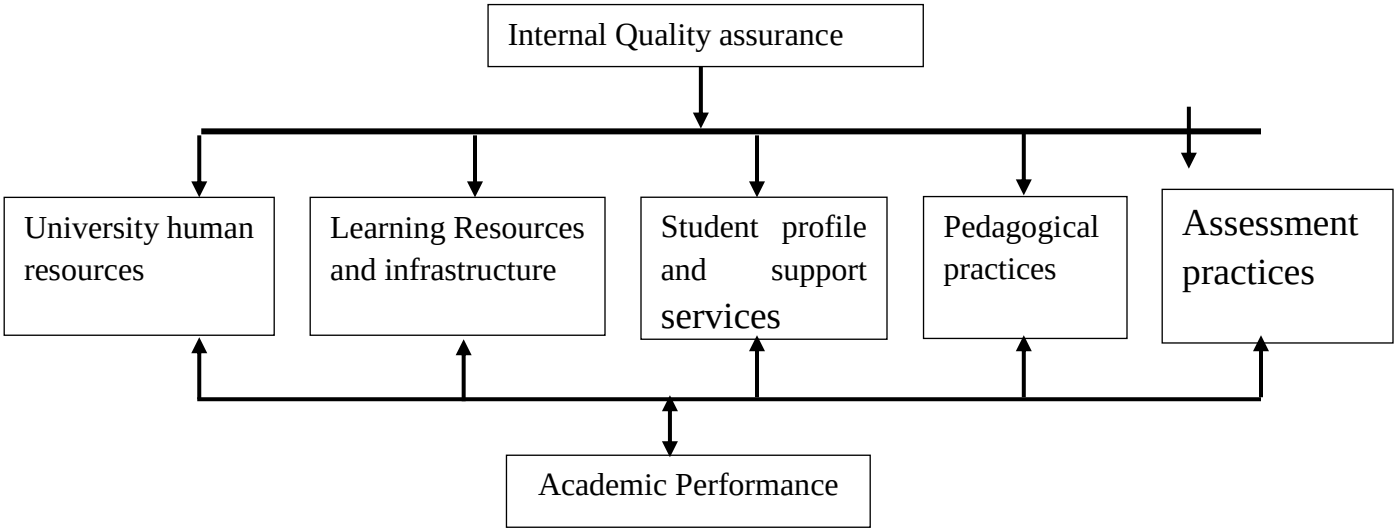
The university should ensure that feedback is regular and consistent. Feedback is commonly known as publication of results. According to Hughes (2011), the feedback process not only promotes learning but also helps to better facilitate it. Depending on the learner's performance, personal feedback is given to each person and can be either positive or negative. For instance, when a lecturer makes comments praising the student's content mastery, the student's confidence will undoubtedly increase. The student can correct any mistakes made while completing a particular task with the assistance of the feedback that is task- and performance-focused. Feedback must be thorough to enable students to consider the assignment and perform some self-evaluation. If students do not receive feedback, they repeat their errors and may even fail more course assessment (Rilly, 2008). Delaying feedback to students will cause them to make the same mistakes when a similar question appears in the exam because they won't know if they passed or failed. This suggests that the students are not making progress. Such practices might result in high examination attrition rates. Unfortunately, what one observes in the University of Yaounde 1 is that feedback is relegated to the background and seemingly appears to be an unimportant academic exercise. For instance, it is evident that students' scripts are hardly returned to the students and therefore feedback is limited to the marks allocated to them by the lecturers without any explanation. This is inappropriate because some students may earn marks they do not deserve or be awarded marks that fall below their actual performance without justification nor room for review. The university per this argument should revisit its policy on feedback because feedback does not only drive learning but facilitates the learning process.

The formulation, monitoring, directing toward and revitalization of program goals and objectives are all made possible through assessment, which is a crucial component of the educational process. Therefore, a requirement for the success of any educational system is the practice of valid, reliable, justifiable, and fair assessment (Areekkuzhiyil, 2019). So, in the University of Yaounde 1, academicians and authorities must make conscious efforts to improve assessment practices at the higher education level in order for it to become a motivating and enjoyable process for students, teachers and other stakeholders. It is therefore the duty of the university lecturers and educational

administrators of the University of Yaounde 1 to redefine the assessment practices and inculcate the culture of fairly assessing learners. Without this culture, examinees or students will suffer from partial and inconsistent assessment. If students fail examinations because of poor setting and marking, then there is a huge problem in the educational sector.

Figure 2: The conceptual diagram which shows the connection between the key variables

Figure 2 shows a representation of the relationship between the dependent variable and the independent variable



(Source: The Researcher, 2022)

Figure 2 demonstrates the relationship that exists between the internal quality assurance (IQA) strategies and the students' academic performance of the University of Yaounde 1. The IQA strategies which constitute the core to the problem under review is broken down into university human resources, learning resources and infrastructure, student profile and support services, pedagogic practices and assessment practices of the university.

Theoretical Background

Theoretical background presents the theoretical foundation on which the research is built. It explains the phenomenon that is being studied. This explanation is grounded in the theories developed by several researchers and prominent theorists. A theory is a generalization, or set of

generalizations by which a researcher makes systematic efforts to explain, characterize, comprehend and predict some phenomenon (Amin,2005). A theory is according to Kerlinger (1998), a predisposition is a systematic approach to defining the relationship between the variables with the intention of deriving explanations for and forecast of the phenomena as cited in Amin (2005). According to Chijioke, Ikechukwu, and Aloysius (2020), an appropriate theory directs the research work by organizing, categorizing, and forecasting phenomena as well as demonstrating their relationships to improve understanding. It provides a framework and serves as a point of departure for the pursuit of a research problem. Therefore, theories are formulated to explain, predict and understand phenomena and in many cases to challenge and extend existing knowledge with the limits of critical bounding assumptions.

In order to enhance the explanation of the functioning of concepts in this research work, five theories and one model are used. The main theory in this study is Total Quality Management (TQM) Theory which helps to highlight the importance of quality assurance and other variables. The other theories used in this study include the Human Capital Theory (HCT) which posits that there should be investment in education and training to make individuals more productive and this can be done through quality assurance, Quality Assurance System of Teaching and Learning (QAS-TL) which is a model that monitors the teaching and learning process, the Classical Test Theory (CTT) which explains assessment practices, Item Response Theory (IRT) which explains how items should be designed and scored, the Generalizability theory (GT) which discusses how a student's performance can be reliably analysed.

Total Quality Management (TQM) theory

Crosby advanced fourteen way to nonstop quality enhancement. These include achieving complete commitment from the operation, forming a platoon for quality enhancement, enhancement, developing criteria for each effort at quality enhancement, estimating the cost of quality and how enhancement will contribute to gain, and providing and providing administrators with the necessary training, the stimulant of workers to fix blights and keep issues logs, the creation of zero disfigurement panels, the determination of the root causes of crimes and removing them from the processes, creation of impulses programs for workers, the creation of quality councils and the holding of regular meeting. Crosby recommended that this process should be repeated in a regular basis and from the first step to the last.

According to the Cosby Theory of TQM and its four absolutes, education stakeholders define quality education based on educational standards and expectations,. According to Richardson (1999), norms and ground rules in higher education support positive behaviors and dissuade those that hinder students from achieving their educational goals and objectives. The goal of zero defect, according to Farooq, Akhtar, Ullah, and Memon (2007), is to make sure that all parties involved in higher education carry out their duties properly by matching educational programs with higher educational institutions' personalities.

The Crosby Total Quality Management (TQM) theory forms the basis for this project in that it states that enough funds should be used to ensure quality education. It then presents numerous steps that could be taken to ensure continuous quality improvement that will contribute to gains.

Quality Assurance System of Teaching and Learning (QAS-TL)

In 2008, a group of four teachers and three technical staff members created the Quality Assurance System of Teaching and Learning (QAS-TL) model. Diagnosis, improvement, quality assurance, and supervision are the four stages of the QAS-TL. According to the model, every participant in the teaching and learning process should always be heard. Students, teachers, course coordinators, and student delegates from each program are among these stakeholders that should be heard at all times to ensure quality.

The initial phase, referred to as diagnosis, involves grading the curriculum units (CUs). The results are collected three times with the help of student delegates and program coordinators, during which time problems are identified and documented in order to create a more thorough diagnosis. The teaching and learning foundation strategy for each teacher's practice is to be described in a report that is elaborated online as part of the second phase, which is improvement. Here, evaluation and documentation of teaching and learning are both done. The third phase of QAS-TL is quality assurance, which entails a designated analysis commission made up of teachers and students analyzing all curriculum unit reports in a given department. A report is created by the commission and submitted for approval. In the process' last stage, supervision, the members of the pedagogical commission should act as mediators. Additionally, the data are assessed by assessed by this commission, and then made public. The procedure is transversal to the previous three phases.

This model is relevant to this study in that it monitors the teaching and learning process which is basis of every educational effort. By monitoring the teaching and learning process, the model sets out guidelines and processes for quality assurance. Once the process of teaching and learning encounters a problem, students' understanding is affected and consequently, they will underperform academically.

Human Capital Theory (HCT)

The Human Capital theory was founded by Becker in 1964. It is frequently used as a theoretical foundation in educational research. This is due to the importance of the human capital theory (HCT), which holds that education or training has the potential to promote economic growth, technological advancement, and productivity because it transfers practical knowledge, dexterities, and skills for higher lifetime earnings. Since investing in people is a form of human capital that spurs social change, the output of that investment must be of high quality. Within the context of the human capital perspective, there is a strong argument to be made for conceptualizing quality as a transformation that prioritizes essential components of higher education, such as the enhancement of the student learning experience and educational processes (Kahsay, 2012).

Higher education will be more successful in achieving this objective if performs better because students need specific skills, knowledge and attitudes to live in the knowledge world (Campell and Rozsnyai, 2002). Horsburgh (1999) additionally argued that the characteristics of graduates should be the center of attention for quality in a world that is changing so quickly, where the learner's transformation is essential. (Kahsay, 2012).

In the study this theory serves as a bridge between internal quality assurance strategies (independent variable) and students' academic performance (dependent variable). Through this connection between the two variables, the importance of investment in human capital (education) is highlighted with predicted benefits seen in high performance of students and eventual employment, job creation and better living standards. This would eventually positively impact society and the world at large.

Classical Test Theory (CTT)

Charles Spearman is credited as one of the creators of the Classical Test theory (CTT), but Novick (1966) codified the CTT and Lord and Novick (1968) described it in a classic text, as well as Allen and Yen (1979). CTT is a body of related psychometric theory that forecasts the results of psychological testing, including the level of item difficulty or test-taker aptitude. A person's observed score on a test is thought to be the culmination of a person's performance on each of the following: an error score and a true score. The CTT, also referred to as the true score theory, makes the assumption that every individual has a true score, T, which would be attained if there were no measurement errors (Truab, 1997). An observed score is believed to be made up of a true score and an error score. An error score is the result of random variation, whereas a true score reflects a test taker's actual aptitude. The expected score after an infinite number of separate administrations of the scale is known as a true score. Unfortunately, test participants typically only see the observed score x and never the test participant's true score. The observed score is assumed to be the true score plus a small amount of error. An error is the portion of the test result that was unexpected and unrelated to the test taker's abilities or knowledge (Traud, 1997).

Understanding and enhancing the validity of psychological tests is the goal of the CTT. Since the true scores would need to be known, which is impossible according to classical test theory, reliability cannot be directly estimated. However, a variety of methods can be used to obtain reliability estimates. Building a "parallel test" is one method of reliability estimation. A parallel test's key feature is that it yields identical true scores and observed score variances for each participant as the original test did.

According to the CTT, reliability is a crucial aspect of every test and is intended to reveal something about the over all caliber of test results in question. The general consensus is that test scores improve as test reliability increases. A single number that conveniently expresses test quality is provided by reliability. The two statistics are the item-total correlation and the P value that are frequently used in item analysis under the CTT. The p value, which is also known as item difficulty, is the percentage of test takers who responded in the keyed direction. Item discrimination is the term used to describe the item-total correlation, which serves as an indicator of the item's discriminatory or differentiating power. This is used to assess items and make any necessary diagnoses.

This theory is relevant to this study in that it describes the best way to understanding and improving reliability of psychological tests. It should be understood that assessment gives feedback on how effective the teaching and learning process was carried out. Therefore, key components of assessment should be taken into considerations to draw conclusions that can be void of errors. The theory of testing is based on the idea that a person's observed or obtained score on a test is the sum total of a true score (error – free score) and an error score. The classical Test Theory is thus relevant to this study in that it seeks to find out whether there are errors in the measurements just like this study which also seeks to find out whether there are errors in examinations organized in the University of Yaounde 1 and to find out whether these errors affect students' academic performance at the university. It is possible to define reliability more accurately and increase test reliability by using classical test theory. This is useful for this study because reliability is an important psychometric property of any examinations like those written at all levels in the university.

Therefore, this researcher is interested in the reliability of examinations organized by the University of Yaounde 1 and its relationship with the academic performance of the students at the said examinations. The CTT also highlights the fact that most test users do not observe a person's true score because of its focus on the observed score. Therefore, every score is composed of two components which include the true score (the score that would be obtained if there are no errors) and the observed score (the true score plus some error).It would be interesting to find out whether the teachers of the university of Yaounde 1 take steps to reduce these errors in measurement in a way that they cannot affect students' performance in any way in their test and end of semester examination.

Item Response Theory (IRT)

The Item Response Theory (IRT) originated from the works of Frederick M. Lord, Georg Rash and Lazarsfeld Fxaz in the 1950s and 1960s. Important players who aided in the development of IRT amongst others included Grake Wright, David Andrich and Novick. Also known as the latent trait theory or the strong true score, the IRT became prominent in the 1970s and 1980s in Psychometrics.

The IRT serves as a paradigm for the creation, evaluation and scoring of examinations and other similar tools used to gauge aptitudes, attitudes and other characteristics. As a result, it is a testing theory based on the correlation between test takers' levels of performance on an overall measure of the ability that the test item was intended to measure (Von Davier & Carlson, 2017). It is preferred in the United States as a method for creating scales because it outperforms the Classical Test Theory, especially when making optimal decisions is required as in the case of the so-called high stakes examinations like the Graduate Record Examination (GRE) and Graduate Management Admission Test (GMAT).

IRT focuses on the item, therefore the response of each examinee shows a given ability to each item in the test. It is based on the idea that the probability of a correct/keyed response to an item is a mathematical function of the person and item parameters. Example of person parameters include intelligence or the strength of an attitude and parameters on which item are characterized include their difficulty level, item discrimination, the pseudo guessing parameter. Among other things, the IRT's goal is to provide a framework for assessing the effectiveness of assessment processes and specific assessment items. Psychometricians use the IRT in education for the development and designing of examinations, maintaining banks of items for examinations and equating the difficulties of examinations for successive versions of examination.

In this study, this theory provides a bridge between internal quality assurance practices seen through the link assessment practices have with students' academic performance.

Generalizability theory (GT)

The Generalizability Theory (GT or G Theory) was first presented in 1963 by Cronbach, L.J. Rajaratnam. N., and Gleser, G.C. It provides a statistical framework for conceptualizing, researching, and creating trustworthy observations is the G theory. It is used to assess a measurement's reproducibility under particular circumstances, or reliability. Through the use of analysis of variance techniques, it offers a flexible and useful framework for estimating the effects of various sources of measurement errors (Alkharusi, 2012). In order to achieve the highest level of score reliability, G Theory aids practitioners and researchers in educational assessment in identifying the proper conditions in terms of items, occasions, and raters' abilities.

A measurement theory known as the G theory is used to determine how reliable data obtained from tests, rating scales, surveys and observation is. Dependability is the ability to accurately extrapolate from a student's observed performance on a test, for example, to the typical score the student would have earned under normal circumstances. Any observed score is regarded in G theory as a sample from a set of valid observations. All possible observations that could be used in place of the given observation make up this universe. For instance, a student's score on a particular test day is not the only reliable measure of how well they performed. A score from a different test administration or a different set of items would also be acceptable, as would a score from a different day.

GT distinguishes between two types of error variance that corresponds to relative decisions and absolute decisions. Decisions regarding the unique characteristics of each student are known as relative decisions. Decisions about the absolute level of performance are considered absolute decisions (Strube, 2002). Researchers who are interested in decisions involving the rank ordering of individuals should pay particular attention to the relative error variance (2) in these cases. The interactions between the individuals and the facets created by random sampling of the measurement conditions are the only sources of error in this instance. This is because interactions involving the object of measurement reflect changes in relative standing across facet levels (Strube, 2002).

This theory is crucial to this study because it can be used to evaluate multiple sources of error in a particular measurement situation and offers more accurate estimates of dependability in those situations. Between relative and absolute decisions, GT makes a distinction. Decisions based on relative comparisons between people are called such. Decisions based on an individual's absolute performance level are referred to as absolute decisions.

In this study, this theory forms a bridge between an internal quality assurance variable (assessment) and students' academic performance. The theory describes the importance of assessment practices on the performance of the students.

Justification of the Study

This study is about internal quality assurance strategies and their implications on students' academic performance in major University in Cameroon which is bilingual but French dominated. The reasons for undertaking research in this area in this university are threefold. First, there is

ongoing debate by stakeholders and the public on the declining quality of education in Cameroon and therefore, the urgent need for strategies to the ensure quality of education and its assurance comes to the forefront. Considering the important role of higher education in national development and emergence, the quality of education and its assurance becomes a major concern for all. Understanding current practices and systems for ensuring quality based on empirical research is necessary to understand how universities demonstrate the quality of their education in a changing higher education environment (Kahsay, 2012).

Secondly, formal quality assurance practices in education especially at the university level are a recent development especially in sub Saharan Africa. In the Cameroon context very little research has been carried out on quality assurance in higher education.

Thirdly, the environmental changes in the higher education landscape in Cameroon necessitate changes in management of higher education in Cameroon. The rapid institutional and environmental growth in the face of financial constraints, the frequent changes in policy priorities, and the perceived decline in educational quality can all be used as examples of environmental changes. (Kahsay,2012). In terms of extending access and study options, public universities are becoming more complex, and they rely heavily on the government for all of their financial resources. These trends raise serious concerns about quality of education and its implications on students' academic achievement. Such changes necessitate the effort to carry out a study like this which will help to fill the research lacuna on the influence of internal quality assurance strategies on students' academic performance in the University of Yaounde 1.

In the sale of services, there should be a connection between higher education and labour market. In fact, quality services depend on customer satisfaction, therefore university students are direct customers while employers are indirect customers of universities. Therefore, higher education service providers should take into account both graduates' and employers' perspectives as the primary beneficiaries of higher education. In order to ensure that students develop operational competences and transferable skills that will ensure their survival in the constantly changing workplace, higher education institutions once again need to develop new models of curriculum, teaching, and students' evaluation strategies. All these can only be achieved with the establishment of an effective quality framework in higher education and this study seeks to add to existing literature on the subject.

This research is an important attempt that focuses on internal quality assurance strategies and relates them to student performance in the chosen university. This study is significant because it expands on previous research on how internal quality assurance strategies at this Cameroonian university affect students' academic performance by providing theoretical and practical knowledge. The study aims to fill a theoretical gap in the literature by examining the impact of internal quality assurance on students' academic performance in higher education in Cameroon. The study can help ignite inspiration for further research in the area.

For Africa to develop, high quality education is crucial. Tertiary education is becoming increasingly crucial to economic growth and competitiveness; as a result, quality in education must come first if these goals are to be met. In most occupations, changes brought on by the shift to a knowledge economy have led to a demand for higher skill levels. A new set of skills, including adaptability, teamwork, communication abilities, and the desire to keep learning, have emerged as crucial. In order to improve the quality of education and training through modifications in pedagogy and content, countries that want to transition to the knowledge economy are challenged to implement reforms.

Recent research has shown that higher education can be a critical catch up factor for developing nations in accelerating the rate of growth toward their potential for productivity (Bloom, Canning and Chan, 2006). This new way of thinking is also receiving more attention from the global community. The importance of post –primary education in fostering competiveness and growth in low- and middle income countries is emphasized in the World Bank's Africa Action Plan from 2005. Higher education institutions provide training in a variety of fields that are essential for achieving the millennium development goals (MDGs). Health, agriculture, science and technology, engineering, social sciences, and research are among these. Additionally, they help to shape national and international policies through research and advisory services. The accomplishment of these goals can be a blessing to quality education in Africa.

The findings of this study imply that a lot has to be done to improve the quality of education in the University of Yaounde 1 in particular and in Cameroonian public and private universities in general. The University of Yaounde 1 remains one of the universities that draw students from all over Cameroon and beyond, therefore special attention should be placed on the quality of their curriculum, teaching, assessment and evaluation. The University of Yaounde 1 is the bedrock of

Cameroons higher education and their products play key roles within and out of the country. This institution has distinct features and draws a majority of students from Cameroon colleges and beyond. It is evident that the activities of this university are very important to the various internal and external stakeholders because it produces graduates from the English speaking and French speaking regions of Cameroon, some of whom aspire to study or work in foreign universities and companies respectively. But then, the results of end of course and end of year examinations have not been good. For instance, according to Ngwana (2003) due to the numerous problems plaguing the University of Yaounde 1, the overall success rate in the annual examinations has been below 50%. This poor performance is a call for concern.

Quality assurance is pivotal in higher education (HE) and greater attention must be paid on it by all educational stakeholders especially the governments. Van der Bank and Popoola (2014) list participation of students in self-assessment as one of the benefits of QA in HE, as well as giving every student an equal opportunity to learn. The capacity to compare programs with those of other institutions, even globally and to continuously improve training and education are both made possible by quality assurance (QA). It creates an intellectual environment where academics take ownership of the development of their own academic or professional careers. When high-quality education is offered, graduate employment is possible. Quality in HE places a focus on self-assessment procedures to encourage accountability and more independence. These advantages call for a study of this nature to pick out the link between quality assurance and the performance of students in Cameroonian universities.

Research has established beyond reasonable doubt that Cameroon's higher education is beset by a number of issues that degrade the standard of its teaching and learning, so a study of this kind is pertinent as it seeks to see if these deficiencies have an impact on university outputs. Task Force (2000), cited in Vuban (2019), claims that university professors and students in developing nations (like Cameroon) experience peculiar issues that affect the quality of higher education. Students face their own challenges while lecturers struggle with low pay and low incentives, outdated rote learning methods, staff recruitment issues related to independent scholarships and academic freedom, concerns about the politicization of Higher Education, lecturer absenteeism, and low pay. According to Task Force (2000), which was cited in Vuban (2019), students explains that poor living and service conditions, poor transition and secondary to higher education, issues with

selection criteria, a lack of remedial programs, financial constraints, infrastructural upkeep, and managing research are just a few of the challenges students face when trying to learn.

The aim of this study is to find out if the university of Yaounde 1 have an effective internal quality assurance system or not and its consequent effect on candidates' academic achievement. This research seeks to find out if the Internal Quality Assurance strategies of the University of Yaounde 1 have an effect on students' academic performance. It seeks to find out whether there are Internal quality assurance strategies in the University or not and as such what correlation is there with students' academic performance. Therefore, policy makers have identified ineffective or the lack of Quality Assurance (QA) as a barrier to the achievement of educational goals and those of learners. Some HEI's currently struggle to retain academic staff while also meeting the expanding needs of students. The fact that staff and students believe that other institutions provide higher-quality education in terms of recognition, career development, and student support could be one of the causes. Therefore, it is crucial for HEIs to make sure that there is a demand for their services. In order to support the social role of HEIs, the growth of QA methodologies, and the implementation of QA results both institutionally and socially, a variety of strategies to make higher education affordable and valuable for students need to be applied on a national level.

Therefore, the importance of this university as one of the main tertiary institution in Cameroon is not only considered within the country but beyond. This proves the value, effort and expense of conducting a study on the standard of education in Cameroon and how it affects students' academic performance. The study's justification aids in preventing the waste of research time on issues that are trivial, superficial, or unimportant. So, the findings of this study will benefit directly the Cameroon universities in focus in particular, all stakeholders involved in higher education, education planners, educational administrators and indirectly lecturers and students. This study will suggest variations in practices as well increase our pre-existing knowledge in the area covered.

Statement of the Problem

Quality assurance is crucial in order to ensure the effective educational advancement and by extension the economic development of any nation. The ability of a nation to grow economically is thought to be strongly correlated with the quality and quantity of educational output, and the environment in which Cameroon's public and private universities operate is changing quickly

despite what might otherwise appear to be contradictory policy direction (Doh, 2015). In today's higher education, emerging trends, new economic challenges, and diversifying expectations are common (Doh, 2015). Greater attention must be paid to the quality of Cameroon's higher education because it is unquestionably one of the most important pathways to emergence. This is due to the ongoing rise in enrollment at Cameroon's universities in general and at the University of Yaounde 1 in particular, as well as the government's strong political ambition to emerge by 2035.

The university's carrying capacities, or the maximum number of students each institution can support while still providing a high-quality education, are constantly being exceeded, necessitating a re-evaluation of how to re-adjust in order to preserve quality. Large class sizes will likely compromise quality in higher education in spite of the growing use of information and communication technologies. The large class sizes in most of the departments of University of Yaounde 1 are therefore, a cause for concern and require a study of this magnitude to find out whether this presents a quality lapse and has an impact on the teaching and learning process as well as on the students' academic performance.

The continuous massification of the University of Yaounde 1 has a direct effect on resources and student learning. Mve (2021) claims that high rates of high school enrolment and completion, an open door academic policy, and resource constraints are to blame for the steady increase in enrolment in higher educational institutions in Cameroon and Sub-Saharan Africa. Although open enrollment at the University of Yaounde 1 has been encouraged and promoted, their financial, physical, and human resources have not increased in a way that is appropriate. Because of this, there is always an imbalance between the number of students and the quality and quantity of the available resources, which shows up in crowded lecture halls, laboratories, and libraries. Large classes, according to Hornsby and Osman (2014), hinder student learning and educational quality, which, in turn, hinders socioeconomic development.

The 'massification' of education, has a detrimental effect on quality assurance and quality assessment in higher educational institutions (Tlali, Mukurunge and Bhila, 2019). For instance, Cuseo (2007) found that large class sizes reduce students' participation in the learning process, the frequency of feedback given to students, and the depth of thought. Additionally, it makes faculty more dependent on the lecture-based approach to teaching. Large class sizes make it difficult for students to engage in deep thought in the classroom, which affects their learning and academic

performance. In fact, having a large class can be distracting for both the teacher and the student, which can lower the standard of instruction. This makes socio-economic development is difficult.

Closely linked to the above has been the unresolved problem caused by the discrepancies in student/teacher ratio in the University of Yaounde 1. According the 2021 Annual year book from the Ministry of Higher Education in 2018, the student/teacher ratio stood at 62:1, in 2019 it was 59: 1, in 2020 it was 56:1 and in 2021 it stood at 51:1. Though the ratio seems to be dropping, maybe caused by some other factors other than actions to ensure quality, it is evident that a single teacher in a university cannot effectively teach and supervise over 50 students in one year. This is a real problem and needs a quick fix solution.

Considering that the ever increasing population of the University of Yaounde 1 negatively affects university resources and student learning, extra effort should be made to ensure quality education in the university. To do so requires a robust quality assurance program with clearly defined quality assurance strategies. It is observed that the University of Yaounde 1 has not established an internal quality assurance structure that can oversee, monitor and implement quality assurance in the entire university. What one finds there is quality assurance cells in the Faculty of Arts, Letters and Social sciences (FALSH) and Faculty of Medicine and Biomedical Sciences (FMBS) only. Even, with these two, they are almost inexistent or existing only in principle because they are ineffective and inefficient within their various faculties. Due to this, the university human resources may be poorly executed for instance in the recruitment procedures. There may be no teacher retention strategies whereby, once a lecturer is in, he or she cannot be dismissed because of incompetence. Lecturers may be overloaded, grappling with overcrowded classrooms, without support for staff development and without well-furnished offices and incentive. Again, the university may pay only little attention to the student learning resources and infrastructure. In fact, most of the resources and infrastructure of the University of Yaounde 1 such as lecture halls, library, learning spaces and building are outdated and this can affect effective teaching and learning in the institution..

On the area of student profile and support services, the university does not admit only the best students with high grades or high cumulative points at the Advanced level or the Baccalaureate examinations. The university admits all students who apply and who have obtained the General Certificate of Education (GCE) Advanced Level certificate in two or more papers or a pass in the Baccalaureate examinations without taking into account the grades obtained by the prospective

student into the degree programs. The absence of stringent admission rules into the University of Yaoundé 1, plays even into the mind-sets of students in high school who are not encouraged to work hard because they are sure of admission into the university once they obtain a pass at the advanced level or the Baccalaureate examinations. The university also lacks effective student counselling services amongst others. Pedagogic practices are inappropriate due to poor infrastructure, incentive, lack of training because of the absence of a training college for university lecturers. The university assessment practices leaves much to be desired as most lecturers seemingly lack knowledge on test development practice and are allowed to develop items that are based on the whims and caprices of the designer. Questions are set without any checks or moderation and the scoring practices are seemingly unfair and not scientific. All these negatively impact the teaching learning process and affect students' academic performance.

Again, the inconsistency and ineffectiveness of bilingualism in the University is indeed a cause for concern especially with regards to teaching and assessment. There are contradictions as to the method and form of testing and scoring. For instance, Kouega (2010) revealed that in the University of Yaounde 1, most Anglophone lecturers are sufficiently bilingual to score scripts written in French well to the satisfaction of French speaking students but that it is the contrary with Francophone lecturers. On the other hand, the same study reveal that Francophone lecturers argue that Anglophones students' scripts were often poorly structured with too many facts lumped up in their scripts, making marking difficult unlike the Francophone students' scripts which always include an introduction, body and conclusion. This differentiates the form of essays in the two sub-systems, yet the lecturers fail to value and master them all. There is therefore need to address this inconsistency in approaches and mastery of both languages by all lecturers in the university of Yaounde 1. This means that students may underperform because of language differences.

The underperformance of students will mean that the skills required for the development of the society and emergence by 2035 is absence. It will also mean that the goals of education have not been achieved. When students perform poorly, they will not graduate on time or have enough time to proceed with furthering their education. For instance, according the 2021 Year book of the Ministry of Higher Education, table 214 presents a summary of meagre performance in FALSH, Faculty of Education and Faculty of Science for example. For instance in 2021, only 82,20% students were awarded First degrees in FALSH, 60.25% in the Faculty of Science, meanwhile 59%

completed their Masters and PhD studies in Faculty of Science and less in the Faculty of Education. In this direction, they will not perform well in their jobs. Poor performance at university is responsible for the high level unemployment in Cameroon because, those who perform well can create jobs for themselves without necessarily waiting for the state to employ them. When a student graduates from university and is unemployed, frustration, misery, criminality sets in and the society is at risk. These affect the economic growth of the society and the nation at large. Therefore, without clear and consistent internal quality assurance mechanisms, the university cannot achieve its role as the oldest bilingual university created to promote teaching and research in Cameroon. The lack of or inconsistent quality assurance practices of the university may be responsible for this student underperformance. Then, the central question that comes to the researcher's mind is whether the absence of or the ineffectiveness of the university quality assurance strategies affects students' academic performance. Consequently, the researcher engaged in such a study to propose possible solutions to research objective and questions.

Objectives of the Study

The objectives of this study are presented under the main and specific objectives as seen below.

Main objective

The main objective of this study is to investigate the effects of internal quality assurance strategies on students' academic performance.

Specific objectives

1. To find out the effects of the university human resources on students' academic performance in the University.
2. To establish the effects of university learning resources on students' academic performance in the University.
3. To find out the effects of University student support services on students' academic performance.
4. To find out the effects of the university's pedagogic practices on students' academic performance.

5. To find out the effects of the university assessment practices on students' academic performance.

Research Questions.

Main Research Question

Do the internal quality assurance strategies affect students' academic performance in the University of Yaounde 1?

Specific Research Questions

- Do the university human resources affect students' academic performance?
- What are the effects of the University learning resources and infrastructure on students' academic performance?
- Do the students' support services affect students' academic performance in the University?
- Do the pedagogic practices (teaching/learning processes) of the university affect students' academic performance?
- What are the effects of the University assessment practices on students' academic performance?

Research Hypotheses

A hypothesis is a tentative assumption made in order to draw out and test its logical or empirical consequences. According to Nworgu (1991), a hypothesis is a conjectural proposition, an informed or intelligent guess about a solution to a problem. To Amin (2005, p128), hypotheses are tentative answers to a problem. There are two types of hypothesis: the alternative hypothesis (Ha) which stipulates that there is a significant relationship between the two variables concerned and the null hypothesis (Ho) which suggests that there is no significant relationship between the two variables. Here the researcher shall examine the general hypothesis and specific hypotheses.

The General Research Hypothesis (GRH)

GRHa1: The university internal quality assurance strategies significantly affect students' academic performance in the University of Yaounde 1.

GRHo1: The university internal quality assurance strategies do not significantly affect students' academic performance in the University of Yaounde 1.

Specific Research Hypotheses (SRH)

Ha 1: The university human resources have a significant affect students' academic performance in the University

Ho1: The university human resources do not have a significant effect on students' academic performance in the University

Ha2: There is a significant relationship between the learning resources and infrastructure with students' academic performance in the University.

Ho2: There is no significant relationship between the learning resources and infrastructure with students' academic performance in the University.

Ha3: There is a significant relationship of students' support services on students' academic performance in the University.

Ho3: There is no significant effect of students' support services on students' academic performance in the University.

Ha4: The University pedagogical practices have a significant effect on students' academic performance.

Ho4: The University pedagogical practices do not have a significant effect on students' academic performance.

Ha5: The University assessment practices have a significant effect on students' academic performance.

Ho5: The University assessment practices do not have a significant effect on students' academic performance in the University.

Scope of the Study

The scope consisted of the geographical scope, the thematic scope, and the theoretical scope. These aspects were important in that it helped the researcher to avoid being misguided by the discovery of interesting information that lies beyond or outside the precincts of the problem under investigation.

Geographical Scope

Geographically, the study was limited to the University of Yaounde 1 which is an upshot of the mother University of Yaounde as well as the lone bilingual but French dominated university in Cameroon and where thousands of young high school leavers flock into in search of knowledge. The University is located in the Mfoundi division of the centre region of Cameroon. It is found in Yaounde which the capital city of the Republic of Cameroon. In this university the students and lecturers were sampled. They were randomly selected from the three faculties of the University. These faculties were chosen on the basis that they carry almost 80% of students and teachers.

Thematic Scope

Thematically, this study set out to investigate the effects the internal quality assurance strategies of the University of Yaounde 1 on students' academic performance. This scientific inquiry shall look into the internal quality assurance strategies of the University of Yaounde 1 and in relation to their effects on students' academic performance. The Internal quality assurance strategies of the University of Yaounde 1 with a particular focus on university human resources, students' learning resources and infrastructure, student profile and support services, strategies to ensure effective and efficient teaching and learning process, assessment and evaluation procedures shall be highlighted and then correlated with students' academic performance.

Theoretical Scope

Theoretically, this study on the internal quality assurance strategies and students' academic performance in the University of Yaounde 1 was guided by Total Quality Management (TQM) theory, the Quality assurance System of Teaching and Learning (QAS –TL), the Human Capital Theory (HCT), the Classical Test Theory (CTT), the Item Response Theory (IRT) and the

Generalizability Theory (GT). The research design used for this study was the correlational research design. The research instruments for this study included two self-made questionnaires.

Internal quality assurance in the domain of higher education in Cameroon is quite new yet an important tool to enhance institutional objectives (Tendongmoh, 2021). Therefore this study was focused on the internal quality assurance strategies of the University of Yaounde 1 with particular attention on how it affects students' academic performance. These strategies evolve around the university's human resources, student resources and infrastructure, student profile and support services, teaching and learning (pedagogic practices), and the university's assessment practices which will examine their influence on students' academic performance.

Significance of the Study

To the University Stakeholders

To the internal stakeholders of the University of Yaounde 1, these findings would open their minds on the importance of effective internal quality assurance strategies especially in the teaching and learning processes. The internal stakeholders include the senior administration of the university, Deans, the Heads of Departments, Lecturers and Support staffs. They must master the internal and external quality assurance strategies put in place to ensure effective and efficient teaching and learning. They should in their own little way take measures that should ensure that quality assurance strategies put in place are highly respected. They must understand and adopt a quality culture. According to Law No. 005 of 16 April 2001 on orientation of Cameroon Higher education, the main aim of higher education should be to maintain quality.

From the study, these stakeholders would understand that adopting and implementing internal quality assurance strategies can guarantee quality products or students at the end of each academic year. The study would enable them to ensure that there is constant interaction with various relevant employers and academic peers in an attempt to maintain standards. The administration will also create a regular feedback mechanism on program quality especially on the university curricula. To make the teaching and learning process effective, the university administration should establish procedures for peer evaluation of teaching, in which a professor or senior academic colleague observe a young lecturer in action and offers feedback on the lecturer's mannerisms (behavioural traits) throughout the lesson.

To ensure student high success rate at the university, the authorities should encourage and enhance student evaluation (Student-lecturer assessment*)* of teaching and learning at all times. The university should also adopt institutional self - assessment practices. From the study, the administration should make an effort in strengthening fair assessments practices of the institution. This effort start from the time of recruitment whereby each newly recruited lecturer must be drilled on item development, administration and scoring of tests. The authorities should in follow up ensure that all the departments have panels that do proofreading of items; item review and moderation of items before test administration. It should make provisions for an item bank in each department or faculty where items are kept after moderation for future random use.

Overcrowded lecture halls, poor teaching and learning conditions, ineffective assessment practices that characterize the day to day activities of higher education in Cameroon require that each stakeholder must understand the needs of quality assurance to ensure the quality of teaching and learning. Through this study, each stakeholder would understand what quality assurance strategy they will have to put in place to ensure that quality education is achieved. The absence of these would have implications on candidates' academic achievement.

To the University of Yaounde 1

To the University of Yaounde 1, the recommendations arising from the findings would encourage them to re-examine the effectiveness and efficiency of their internal quality assurance strategies in ensuring quality teaching, learning, assessment and evaluation practices as well as quality learning outcomes. These strategies should include a meticulous effort in ensuring expert curriculum development, lecture delivery, assessment and evaluation practices. The university administration must ensure that there is constant in-service training on assessment and evaluation practices, peer examination of pedagogical practices, constant self-assessment and capacity building. The study would also encourage the University to establish an upright and reliable method of staff recruitment based on qualification, professional experience and competence not only in teaching but in measurement and evaluation. This means that teaching in the university should not only be based on qualification but on teaching methods. This study also intends to be a lens through which areas of weakness could be identified and rectified by the University of Yaounde 1 authorities. It would enable the universities to reassert their positions as the oldest university in Cameroon that sets standards for others to follow. The study would also help the University of Yaounde 1 to

develop a commitment to establish internal quality assurance machinery that can on a regular basis assess the quality of teaching and learning. The institution will be able to establish regular monitoring and supervisory mechanism to check teaching and learning which are the basic roles of any university. This study hopes to assist the universities to formulate appropriate policies to ensure effective internal quality assurance strategies for efficient teaching and learning. This will go a long way to contribute to the student academic achievement and remove negative effects on their performance. Expectations from students are not static, but can evolve over time to reflect the goals of the educational system and society at large. As societal trends change, so will the expectations of the knowledge and skills required of teachers and learners. Therefore, the Universities must continue to evolve in terms of quality input to meet with these changes.

To the University Lecturers

The University lecturers should by this study learn to enhance their knowhow on transparent and accurate scoring practices after defining with clarity assessment and marking criteria at the beginning of each course. In fact the study and mastery of educational measurement and evaluation should be a condition sine qua non for the recruitment of all lecturers into the universities of Cameroon. Otherwise, all newly recruited university lecturers should undergo training in test construction and other aspects of measurement and evaluation. They will ensure that all curricula in the institution are drawn in conformity with the goals and objectives of the school in conformity with state philosophy alongside instruments to ensure regular needs assessment and evaluation of the curricula. The lecturers would also be aware that using new media and teaching techniques can be innovative for students and that it is always necessary to explain to students the various ways of reasoning and thinking that are expected as well as the ways in which language is used in the assessment context before each test.

To the lecturers who are the main actors in the teaching and learning process and double as item developers, invigilators and examiners, the findings herein would help them understand that effective teaching including work coverage is the only guarantee to good performance and achievement of their students. The lecturer must be well motivated, contented, poised and eager to propel their students to success at all cost. They should make their students develop self-confidence and self-reliance in pursuit of knowledge rather than on short cuts to success. The study would encourage them to develop the interest for further studies on item development, test structure

analysis as well as in measurement and evaluation in general. In this case Lecturers' test shall always a representative sample of subject domains or topics. Their test construction strategies would affect students' performance positively.

To Higher Education Policy Makers and Planners

To all the higher educational Policy makers, planners and administrators in Cameroon, the study's findings would aid them in revising the policies governing higher education, particularly those that deal with quality control in higher education institutions. The Prime Ministry, the Ministry of Higher Education, Parliamentarians, and Senators are among the decision-makers. They need to provide opportunities through the provision of resources for the training of university teaching personnel on pedagogy and in educational measurement and evaluation. By so doing, employment into the Cameroon universities should not be based on qualification and other factors alone but on expertise in teaching, measurement and evaluation because one cannot manage, teach and measure effectively what he/she does not know.

This study would also cause them to make provisions for budgets that can sponsor in-service training as well as better working conditions to the lecturers and support staff of Cameroon's higher educational institutions as well as adequate infrastructural and other student support facilities. The study will also open their eyes on how to control the activities of the universities and sanctioning where and when necessary. This study hopes to assist the government to formulate appropriate policies on both the conduct of quality controls in all state universities so that student output is not compromised. The study's findings will also help with resource management, policy revitalization and appropriate innovation in the areas of staffing, facility levels, minimum academic standards and matching student enrolment with carrying capacity of individual universities. The study will also encourage the stakeholders especially the Ministry of Higher Education to establish instruments to encourage effective research in universities and which will ensure that those lecturers who receive annual research allowances actually carry out research.

To the other External Stakeholders

The other external or international stakeholders include the International Monetary Fund (IMF) which influence and interact with the country through the growth and employment strategy paper and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The goals

that are deemed strategic are influenced by the IMF because IMF is a significant donor to the Cameroonian education sector (Doh, 2015). The Millennium Goals and the Poverty Reduction Agenda are two IMF and World Bank policies that have influenced the goals of higher education in Cameroon. UNESCO which supports national efforts to enhance quality in Cameroons higher education can draw conclusions based on these findings so as to be able to understand where they can intervene. UNESCO supports equity and equal opportunities to all learners, therefore the findings herein shall be of great importance in influencing its policy in Cameroon.

CHAPTER TWO

REVIEW OF RELATED LITERATURE, CONCEPTUAL AND THEORETICAL FRAMEWORK

This chapter focuses on the review of the related literature on which some authors have written on issues related to the quality assurance in higher educational institutions and academic performance of students. It reviews the works and opinions expressed by some authors and researchers on related topics. Literature review is a scholarly activity aimed at contributing new insights or new information to a field of study. The literature review establishes the base upon which this new study stands. Key and relevant concepts on quality assurance are identified and explained herein. Theories and empirical literature that are linked to this study are also outlined and explained. Therefore, the review of related literature shall be discussed under four broad areas: Conceptual framework, theoretical framework and review of related literature based on variables of the study.

Conceptual Framework

This section of the study describes the relevant concepts used in the study. The conceptualization of your study is the most crucial stage for educational researchers because it determines the type of data to be collected, where to collect it and how to analyze it (Rossman and Rallis, 2012). The conceptual framework is frequently defined as a set of ideas, presumptions, expectations, theories, and beliefs that underpin and guide research (Adom et al., 2018). It is referred to as a digital or written product that describes the main topics under study, such as the important concepts, variables, or factors and the assumed relationships among them, either geographically (Maxwell, 2005). The enterprise is given coherence by conceptual frameworks, which function like maps (Bendassolli, 2013). In addition, according to Shields and Tajalli (2006), a conceptual framework can link all facets of empirical inquiry, such as problem definition, purpose, literature review, methodology, data collection, and analysis. The purpose of the conceptual framework is to help inform the rest of your design, to help you evaluate and improve your goals so that you can create pertinent and realistic research questions, and to help you choose the best research methodologies. (Maxwell, 2007).

A picture or visual representation of how concepts in a study relate to one another within a theoretical framework is provided by the conceptual framework, which offers a logical structure of connected concepts. It is not just a list of ideas; rather, it is a way to reveal to the reader the researcher's epistemological and ontological worldview regarding the subject of the study (Grant and Asanloo, 2014). Once this is done, the researcher can start figuring out how to approach writing the dissertation. The conceptual framework also gives you the chance to specify and define concepts within the problem.

The conceptual framework organises the key concepts in the study in order to define the focus and direction for the study. The key ideas are derived from an examination of relevant terms and concepts found in literature as well as from the results of literature theories. According to Thomas (2012), a conceptual framework is formed through extensive and in-depth reading of relevant literature and links research projects to ongoing discussions in the researcher's field by establishing the following parameters: firstly, it serves as a reminder of the research project's focus and its limitations; secondly, it offers guidance for the creation of research questions, design, and further literature searches.

Internal Quality Assurance (Institutional quality assurance) (IQA)

Internal quality assurance (IQA) is the term used to describe the university's internal policies and procedures for ensuring that it is carrying out its objectives as well as the standards that are applicable to higher education in general or to the profession in particular (IIEP, 2016). Quality is a multi-dimensional concept with no universally agreed-upon definition, but generally speaking, it gauges the extent to which standards are met. In institutional processes, including those of higher education, quality has emerged as a crucial intrinsic factor. Internal quality assurance also known as internal verification, is a method for ensuring a consistent and high standard in the assessment process. It also involves providing support for assessors in terms of practice, development and monitoring. This is also known as institutional quality assurance.

Internal quality assurance can be defined as processes and practices that assess, monitor, guarantee, maintain and improve the quality of inputs, processes and outputs. As a mechanism, quality assurance often focuses simultaneously on both accountability and control by ensuring that certain standards are met and that services are appropriately delivered and on improvement or

enhancement which involves promoting future performance rather than judging past performance (Harvey, 2007). Internal quality assurance is the procedure that a learner in an educational institution will use to monitor the teaching, learning and assessment activities therein. In order to distinguish it from external quality assurance, internal quality assurance refers to quality assurance performed inside a university by an internal employee or quality assurance specialist. In order to ensure the quality of its teaching and learning, a single university can put its internal quality assurance mechanisms in place without affecting other institutions. Here, graduates and the public interest will be satisfied, as well as her customers, who are the employers.

Standards and Guidelines for Internal Quality Assurance

There are the following standards and guidelines that govern internal quality assurance according to the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). These standards and guidelines can fit well in any context and so can be usefully applied in Cameroon higher Educational system in general and in the University of Yaounde 1 in particular.

There should be a clear policy for quality assurance. This should include setting standards whereby institutions should have a policy for quality assurance that is made public and forms part of the strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.

Secondly, with the knowledge that policies and procedures are the primary pillars of a cogent institutional quality assurance system, which forms a cycle for continuous improvement and contributes to the institution’s accountability, guidelines should be clearly stated. It encourages the growth of a quality culture in which all internal stakeholders take ownership of the institution's quality and participate in quality assurance at all levels. The policy has a formal status and is accessible to the general public in order to facilitate this. The most effective quality assurance policies take into account the relationship between research, learning, and teaching as well as the institutional context, and the strategic approach of the institution. Such a policy supports:

- the organisation of the quality assurance system;

- departments, schools, faculties and other organisational units as well as those of institutional leadership, individual staff members and students to take on their responsibilities in quality assurance;
- academic integrity and freedom and is vigilant against academic fraud;
- guarding against intolerance of any kind or discrimination against the students or staff;
- the involvement of external stakeholders in quality assurance.

The policy is translated into practice through a number of internal quality assurance procedures that permit participation from across the institution. The institution decides how the policy will be put into action, followed, and revised. Any activities performed by third parties under contract with an institution are also covered by the quality assurance.

Thirdly, standards and guidelines should be set in the design and approval of university programs. In this direction, university institutions should have processes for the design and approval of their programs. The programs should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a program should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and consequently, to the framework for qualifications of the European higher education area. Guidelines should be established so that the study programs are at the center of the teaching mission of higher educational institutions. They give students' academic knowledge as well as transferable skills that they can use in their future careers and that may have an impact on their personal development. In this case, the programs

- are designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes;
- are also designed by involving students and other stakeholders in the work;
- benefit from external expertise and reference points;
- reflect the four purposes of higher education of the Council of Europe (Scope and Concepts);
- are designed so that they enable smooth student progression;
- define the expected student workload;
- include well-structured placement opportunities where appropriate;
- are subject to a formal institutional approval process.

Internal quality assurance should, once more be distinguished by student-centered instruction, evaluation and learning. Institutions should make sure that courses are taught in a way that motivates students to actively participate in the learning process, and that this approach is reflected in how students are evaluated. Students' motivation, self-reflection, and involvement in the learning process are all greatly influenced by student-centered learning and teaching. This entails giving careful thought to the formulation and execution of study plans as well as the evaluation of results. Student-centered teaching and learning implementation:

- respects and attends to the diversity of students and their needs, enabling flexible learning paths;
- considers and uses different modes of delivery, where appropriate;
- flexibly uses a variety of pedagogical methods;
- regularly evaluates and adjusts the modes of delivery and pedagogical methods;
- encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher;
- promotes mutual respect within the learner-teacher relationship;
- has appropriate procedures for dealing with students' complaints.

The following factors are taken into account by quality assurance processes for assessments because of the significance of assessment for students' academic progress and future careers:

- Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field;
- The criteria for and method of assessment as well as criteria for marking are published in advance;
- The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process;
- Where possible, assessment is carried out by more than one examiner;
- The regulations for assessment take into account mitigating circumstances;
- Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;
- A formal procedure for student appeals is in place.

Fifthly, guidelines for students' admission, advancement, recognition and certification must be established by internal quality assurance agencies or cells to ensure efficiency in higher education. All phases of the student life cycle should be covered by pre-established, published regulations, which institutions should consistently follow. This includes, for instance, student admission, advancement, and certification. It is in the best interests of individual students, programs, institutions, and systems to provide the conditions and support required for students to advance in their academic careers. It is vital to have fit – for – purpose admission, recognition, completion procedures particularly when students are mobile within and across higher education systems. It is important that admission processes and criteria are implemented consistently and in a transparent manner. Induction to the institution and the program is provided. Institutions need to put in place both processes and tools to collect, monitor and act on information on student progression.

For students to make progress in their studies while fostering mobility, fair recognition of higher education qualifications, study time, and prior learning is crucial. This includes the recognition of non-formal and informal learning. In order to ensure uniform recognition across the nation, appropriate recognition procedures depend on institutional practice for recognition being in accordance with the principles of the Lisbon Recognition Convention and collaboration with institutions, quality assurance organizations, the national European Network of Information Centers (ENIC), and the National Academic Recognition Information Centers (NARIC). Graduation represents the culmination of the students' period of study. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.

Internal quality assurance should define the characteristics of a quality teaching staff. For qualitative results, university lecturers should display proven mastery of subject matter, proven and up to date research competences, should possess good public speaking qualities and display a high level of verbal fluency amongst others. Institutions should reassure themselves that their teachers are competent. For the hiring and training of employees, they ought to use fair and open procedures. In order to provide students with a high-quality learning environment and to make it possible for them to acquire knowledge, competences, and skills, teachers play a crucial role. Student-centered learning and teaching are necessary due to the diversifying student body and increased emphasis on learning outcomes, and as a result, the role of the teacher is also changing.

Higher education institutions are primarily accountable for the caliber of their staff and for fostering an environment that enables them to do their jobs well. Such a setting:

- sets up and follows clear, transparent and fair processes for staff recruitment and conditions of employment that recognise the importance of teaching;
- offers opportunities for and promotes the professional development of teaching staff;
- encourages scholarly activity to strengthen the link between education and research;
- encourages innovation in teaching methods and the use of new technologies.

The next areas where quality assurance should be focused are learning resources and student support. Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources as well as student support are provided. For a good higher education experience, institutions provide a range of resources such as libraries, study facilities, information and technology, infrastructure and human support in the form of tutors, counsellors and others. The role of support services is of particular importance in facilitating the mobility of students within and across higher education systems.

The needs of a diverse student population such as employed and international students and a shift towards student centred learning and flexible modes of teaching and learning are taken into account when allocating, planning and providing the learning resources and student support. Support activities and facilities may be organised in a variety of ways depending on the institutional context. However, the internal quality assurance ensures that all resources are fit for purpose, accessible and that students are informed about the services available to them. In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.

Information management is another important element to consider in internal quality assurance. Institutions should ensure that they collect, analyse and use relevant information for effective management of their programs and other activities. Reliable data is crucial for informed decision –making and for knowing what is working well and what needs attention. Effective processes to collect and analyse information about study programs and other activities fit into the internal quality assurance system. The information gathered depends to some extent on the type and mission of the institution. The following are of interest:

- Key performance indicators;
- Profile of the student population;
- Student progression, success and drop-out rates;
- Students' satisfaction with their programs;
- Learning resources and student support available;
- Career paths of graduates.

Various methods of collecting information may be used. It is important that students and teachers are involved in providing and analysing information and planning follow – up activities.

Public information is also very important in quality assurance. Institutions should publish information about their activities, including programs, which are clear, accurate, objective, up to date and readily accessible. Information on institutions' activities is useful for prospective and current students as well as for graduates, other stakeholders and the public in general. Therefore, institutions provide information about their activities, including the programs they offer and the selection criteria for them, the intended learning outcomes of these programs, the qualifications they award, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students as well as graduate employment information.

Effective internal quality assurance strategies are characterised by ongoing monitoring and periodic review of programs. Institutions should monitor and periodically review their programs to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews should lead to continuous improvement of the program. Any action planned or taken as a result should be communicated to all those concerned. Regular monitoring, review and revision of study program aim to ensure that the provision remains appropriate and to create a supportive and effective learning environment for students. They include the evaluation of the following:

- The content of the program in the light of the latest research in the given discipline thus ensuring that the program is up to date;
- The changing needs of society;
- The students' workload, progression and completion;
- The effectiveness of procedures for assessment of students;

- ❖ The student expectations, needs and satisfaction in relation to the program;
- ❖ The learning environment and support services and their fitness for purpose for the program.

Programs are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the program is adapted to ensure that it is up to date. Revised program specifications are published.

Lastly, cyclical external quality assurance is also very important in effective internal quality assurance. Institutions should undergo external quality assurance in line with the European Standards and Guidelines (ESG) on cyclical basis. External quality assurance in its various forms can verify the effectiveness of institutions' internal quality assurance, act as a catalyst for improvement and offer the institution's new perspectives. It will also provide information to assure the institution and public of quality of the institution's activities. Institutions participate in cyclical external quality assurance that takes account, where relevant of the requirements of the legislative framework in which they operate. Therefore, depending on the framework, this external quality assurance may take different forms and focus at different organizational levels such as a program, faculty or institution. Quality assurance is a continuous process that does not end with the external feedback or report within the institution. Therefore, in order to prepare for the next external quality assurance activity, institutions make sure that the progress made since the last one is taken into account.

Steps to Quality Assurance

To ensure a qualitative education in our school system, Babalola (2004) posits that the following steps should be taken. These include monitoring, evaluation, supervision and inspection.

Monitoring: This has to do with keeping a watchful eye on the input, process, output and environment of an educational system to ensure that things are going in the right direction and according to the set standards. For example, one way can be in the monitoring of the teaching and learning processes or students' progress from one class to the other. University authorities are those charged with the implementation of this.

Evaluation: This involves assessment, appraisal, evaluation and estimation of the worth of education input, process and outcome for the purposes of making judgment and corrective criticisms. This involves the assessment of the level of achievement of standards or set goals.

Supervision: This deals with overseeing those who are responsible for one thing or the other such as teaching, learning, resource utilization, educational management amongst others in the process of educating the students. Those concerned here at university level are the Rectors or Vice Chancellors, Registrars, Deans and Heads of Departments.

Inspection: Inspection is more penetrating and piercing than supervision. It is job focused and scientific in approach. It involves close examination, check, scrutiny and assessment of a available facilities and assessment of available resources in an institution with a view of establishing how far a particular institution has met prescribed standards.

Indicators of Quality Assurance

There are many quality assurance indicators but as a way to gather data and statistics about educational effectiveness, efficiency and performance in various contexts, educators have developed quality assurance indicators (QAIs) (Calmers, 2008). The requirement for objective evaluation and quality improvement is the point at which all quality metrics converge. Quality metrics are measurements of the value and performance of products, services and processes. According to UNESCO (2002), the five key components of quality assurance indicators are:

(a) What learners gain

(b) Quality Learning Environments

(c) Quality Content

(d) Processes that support Quality; and

(e) Outcomes from the learning environment.

According to Ehindero, (2004), additional quality assurance indicators include:

(i) learners' behavioural characteristics, attributes and demographic factors,
(ii) teacher's professional competencies/pedagogic skills,

(iii)teaching processes, curriculum and learning environment, and

(iv)the outcome of education.

Quality assurance indicators could be classified as simple quality indicators, performance quality indicators and general quality indicators (Chalmers, 2008). Simple performance quality indicators actually have a quantitative nature. Quality assurance evaluators use the straightforward quality indicators to give a comparatively unbiased description of a circumstance or procedure in the educational system. Such quality control frequently yields absolute numbers free of moral judgment. On the other hand, performance indicators are quality control measures connected to a specific learning or teaching standard, educational objectives, goal of examination, and evaluation of educational activities. The outcome is relative rather than absolute and it is heavily depended on valued judgment. The general indicators however are used for quality assurance that is essentially externally driven to elicit opinions, survey findings or general statistics (Chalmers, 2008).

According to Warglien and Savoia (2006), quality assurance indicators can also be divided into input, output, process and outcome categories. Quantitative indicators are used for input and output. The quality of the human, financial, and physical resources available within formal school systems are assessed using input indicators, which are used in quality assurance. Due to its quantitative nature, the result of input indicators is limited by its inability to clearly determine quality without extensive interpretation. In order to assess the quality of the learning environment, including the infrastructure and instructional resources that were used to produce the reported results, output indicators are used.

The drawback of output indicators is that they only reflect numerical value, with no consideration given to the accuracy of the numbers. The process indicators are used to qualitatively assess the methods for delivering educational activities, services, and programs inside of educational institutions. The process indicators examine how the educational system functions in a specific environment. It is an effective way to compare school quality both within and between schools. However, institutions and policy makers use outcome indicators in quality assurance to assess the effectiveness of academic endeavors, educational goals, and service delivery. Like output indicators, outcome indicators do not produce results in numerical data, but rather qualitatively assess complex processes.

University Human Resources

University human resources pertain to the human capital or those involved in facilitating in one way or other the teaching and learning processes of the university in view of ensuring effectiveness and efficiency. This includes the faculty, administrators and support staff of the university. Human resource management refers to methods for ensuring that these resources are handled in a way that guarantees quality assurance for the successful accomplishment of specified goals and the university's teaching and learning procedures. Human resource management (HRM) is a set of activities and functions that are focused on creating and maintaining an organization's or business's labor structure(Tocher and Rutherford, 2014). Recruitment, selection, evaluation, training, compensation, and employee relations are some of these HRM activities (Guest, 2011). The purpose of HRM is to translate the organization's strategic goals into human resource policies and to develop competitive advantage in producing human resource strategies (Tyson, 1995). For this to be achieved, HRM should be strategic in nature and character. Strategic HRM involves designing and implementing a set of proactive human resource (HR) policies or practices that ensure that an organisation’s human capital contributes to the achievement of its corporate objectives (David, Chin and Victor, 2002).

Based on these, a well-grounded recruitment and selection system should be put in place by the university of Yaounde 1 to be able to achieve long term sustainability in university functioning. According to Allui and Sahni (2016), a typical organizational selection process involves evaluating candidates on a range of factors, from objective and individual factors like expected output quality and leadership potential to subjective and measurable standards like years of experience and educational attainment. Colleges and universities use a variety of selection tools or devices, including application forms, evaluation of written materials like letters, resumes, portfolios, and simulated demonstrations by the applicants, tests, various types of interviews, physical examinations, reference and background checks, and occasionally on-site visits to current employers, to accomplish this effectively. These methods are very essential in the recruitment of staff at the University of Yaounde 1 and if inadequate methods are used it may affect the smooth functioning of e institution and the performance of students.

Another area of interest in university human resources is in training and development of university human resources. Strategic human resource development, which Hall (1984) defined as identifying

and managing employee learning in conjunction with long-term business strategies, emphasized the significance of training and development. Harvey (1983) reaffirms the need for a carefully aligned human resource training and development plan in order for training and development to support the achievement of organizational objectives. Ironically, despite being in the education business, colleges and universities have hardly given attention to staff development and training in order to preserve the vitality of the faculty and administration (Bush and Ames, 1984). This is a glaring example of the situation at the University of Yaounde 1.

Again, human resources can be improved upon with the establishment of performance and appraisal system. This control system allows for the evaluation of individual performance in relation to strategic targets with the aim of achieving efficient job performance. Evaluation of university lecturers' performance is crucial to achieving the objectives set by the institution, but what is frequently seen is an excessive reliance on research that is occasionally irrelevant to what is taught in the classroom. However, efforts at analysing teaching performance of lecturers have made with resistance. According to Corson (1975), efforts to analyse teaching performance are frown upon by many universities as unneeded or inconsistent with the academic tradition. Yet faculty members can alleviate their perceived shortcomings through a combination of assessment: student evaluations, peer evaluations, which are essential components of faculty development.

A study done by Turk (2008), looked at the performance appraisal in the motivation and compensation of academic staff in Estonia. Using quantitative and qualitative methods, the research showed that the performance appraisal and compensation system (pay-for-performance system) has guaranteed a highly motivated core of staff. According to Turk (2008), a good and well-functioning performance appraisal system would help the educators to make their mark in organizational setting of their faculty.

University human resources can also do better if there is a good compensation system. By this, the university establishes a reward system which indicates what the institution considers to be important. Therefore, reward should match with the accomplishment of strategic institutional goals. There are other conditions that can free up employee energy such as freedom, diversity, taking risk and time (Mckeachie, 1983). So the conditions shouldn’t be limited to just pay. In addition to pay, Todd (1981) contends that three characteristics must be taken into account when developing a system linking employees with organizational strategy in universities. The strength

of the performance-reward link, employee influence over and control over their work, and the clarity of management expectations and employee evaluation are among them.

Again, HRM should also include a good retention plan and culture to be able to achieve objectives. A university's success depends on its capacity to attract and hold onto a talented professoriate. Since there is evidence that retention raises institution quality, there has been a growing need for institutions to improve retention of desirable faculty lecturers (Bataille and Brown, 2006). Because of this, the topic of effective retention strategies in higher education has grown in popularity (Berry et al., 2001). A study by Chew (2004) found that 68% of business professionals thought that keeping talented employees was more crucial than finding new ones. Therefore the universities of Cameroon in general and that of Yaounde 1 in particular should adopt a retention strategy that is clear and practicable.

In the study, the strategies to ensure an effective, efficient and quality human resource management for quality results include teacher recruitment procedures, lecturer retention strategies, staff incentives, staff support services, staff grievance redressal procedures, workload and management styles.

Student Learning Resources and Infrastructure

Student learning resources and infrastructure are those resources and infrastructure that enhance the teaching and learning processes. These include but not limited to textbooks or library resources, laboratories, computing facilities, digital resources, health facilities, didactic materials and counselling services. There are established systems and procedure for maintaining and utilizing physical, academic and support facilities.

Infrastructural resources here simply imply to those structures that make the teaching and learning process comfortable. These include spacious lecture halls, well equipped laboratories, sports and physical education facilities, friendly learning spaces, comfortable and beautiful university buildings and well equipped offices. The needs for infrastructural facilities are assessed by various parameters like the introduction of new courses, increase in intake of students, changed curriculum demanding the introduction of new technological innovations.

Quality assurance can be assured in the University of Yaounde 1, if the institution ensures that it provides spacious classrooms, equipped with ready ICT with projectors and screens where teachers can easily use power point or multi-media presentations in the classrooms as plug and play. Learning can be effective with the creation of well-equipped laboratories with spacious and appropriate seating places. Teachers should also be provided exclusive staff rooms equipped with computer and internet connectivity. Again, the university should establish libraries filled with books, internet connectivity and good seating arrangement. The university should also have a central computer facility with up to date computers and internet connectivity. All these, along the provision of spacious administrative offices and electrical generators would facilitate the teaching and learning process.

In this study, the following strategies are highlighted to promote the teaching and learning processes in the university. This include the provision of social services, maintenance of appropriate class sizes, provision of efficient counselling services, provision of learning facilities, up to date infrastructural resources and the provision of learning spaces.

Student Profile

The student profile here constitutes the characteristics of prospective students as enrolled students. These are prospective students' qualifications upon admission, students' characteristics, and perceptions, transcripts from other previous colleges, career interests, grades, technology use. Students who have high grades on admission would be highly motivated to learn. So the student profile shows all the student information on their academic load, and academic eligibility, as well as course performance, including the probability of passing and course activities. The ability of a university to draw in and retain a talented professoriate determines its success. There has been an increasing need for institutions to improve the retention of desirable faculty lecturers because there is evidence that retention improves institution quality (Bataille and Brown, 2006). As a result, effective retention strategies in higher education have become more and more popular (Berry et al., 2001). 68% of business professionals believed that keeping talented employees was more important than hiring new ones, according to a study by Chew (2004).

It is the place of each university to carry out student profiling to ensure that they have details of all prospective students. These details are important because some newly admitted students may

require remediation, counselling and guidance in their academic venture. It can be beneficial for staff to get to know students and see things from their perspectives. Planning, classroom design, time management, and support can all be informed by this to encourage student participation and contribution in all classroom learning.

Student Support Services

The student services concept is used to describe as the departments that provide services and student support in higher education. Its purpose is to ensure the students growth and development during academic experience (NASPA, 2012). Student support services entail those services in the university that support student learning. These include availability of scholarship programs, counselling services, grievance redressal opportunities, restaurant services, accommodation, services and student representation in university decision making bodies, support for students with disability. Students are highly motivated to learn when the institutions make provisions for merit based scholarships and fellowships. Regular counselling of students can be reassuring, remediating and encouraging.

Student support and services contribute to the quality of their learning experience and their academic success. Studies show that the most important factors in education quality assurance are quality of teaching-learning process and service systems and support for students (Hill et al., 2015). Therefore, the importance of support activities for students is obvious but also presents the management of services with difficulties due to the increasing number of students and their needs. Support services also help to decrease the university dropout rate and increase the diversity of students. Without effective student services, students that do not have an academic, emotional and social connection with the institution at cultural level are more likely to give up their studies (Ciobanu, 2013).

Therefore, a university like the University of Yaounde 1 should make available up to date support services to enhance effective teaching and learning processes. In this direction, instruments should be put in place to ensure constant monitoring and maintenance.

Pedagogic Practices (Teaching and Learning practices)

Pedagogic practices mean the actual teaching and learning processes which are central to university functioning. Pedagogic practices are means by which learning experiences can be enriched to promote students' learning. The field of pedagogy studies both teaching theory and practice (Fullan, 2000). Teaching requires an understanding of students' needs, as well as their backgrounds and personal preferences, as well as the mastery of cutting-edge teaching strategies and classroom evaluation (Voss, Kunter, and Baumert,2011). The art of teaching involves knowing when and how to use each of the various methods for transferring knowledge to students (Guerriero, 2012). The term "classroom evaluation" refers to knowledge of the various forms and purposes of formative and summative evaluations, as well as knowledge of how various frames of reference affect students' motivation. According to Ludigo et al (2019), the best pedagogical strategy that should be adopted by university lecturers to ensure students' academic performance should be the student –centred teaching method.

For the university to achieve its objectives there should be quality in the teaching and learning practices. In this direction, for teaching and learning to be effective and efficient, strategies should be put in place to ensure quality teaching in view of producing quality products. These should include peer evaluation of teaching, student – lecturer assessment and lecturer development, use of new media in teaching and adoption of student-centred teaching. Thus, the improvement of the teaching-learning processes implies changes in the ways of teaching, learning and evaluating, reconstructing the roles of the Professor and the student (Oliviera Sa and Costa-Lobo.2019). The reconstitution of these roles consists, in summary, in the Professor focusing the teaching on the students' learning and the students participate actively, developing processes of reflection and self-evaluation of their learning. The perspective of unity and interaction in the domains of teaching, learning and evaluation changes the more traditional forms of teaching organization, centred on the teacher and of the learning evaluation, focused on the product. Here emphasis is placed on student participation in learning.

The University of Yaounde 1 therefore, should make genuine efforts in the continuous career development for its teachers so that they should continue to be useful in the teaching and learning processes. These efforts should be reinforced by the promotion of in-service training, support for staff development within and out of the country.

Internal quality assurance strategies in pedagogic practices include student –teacher evaluation strategies, teacher-teacher evaluation strategies, staff continuous learning opportunities and employer and university interactions.

Assessment Practices

In education, assessment is a term used to mean a systematic process of gathering data from a variety of sources in order to understand, describe and improve learning (Nworgu, 2015). It can also be defined as the process of collecting, synthesizing and interpreting information to aid in decision making. According to Sawand et al (2015)**,** in order to improve university academic programs, assessment is a continuous process that involves setting high expectations for student learning, tracking students' progress toward predetermined learning outcomes, providing a framework for reflection, discussion and feedback. Expectations and standards are made explicit and made public through a systematic and interactive process.

There are two categories of assessment methods: formative assessment, which tracks students learning progress while giving feedback on the successes and shortcomings of teaching and learning initiatives. Therefore, it involves the teacher responding to the students' needs. These feedback mechanisms aid in modifying and enhancing the teaching and learning processes. Second, there is summative assessment, which describes what students have accomplished during a period of instruction and summarizes student learning. Such a description makes it easier to grade assignments so that they reflect how well the student performed in relation to benchmarks or standards.

The purposes of assessment are evident because assessment helps in information collection of information on student learning, learner improvement, grading and making administrative decisions on students' learning.

Table 1: Purposes of assessment

Sn	Purpose	Explanation
1	Measurement	Gathering information based on evaluative judgment
2	Formative evaluation	The use of information for learner improvement

3	Administrative decisions	Based on measurement and evaluation for making decisions that have a consequence

Source: adapted from the work of Astin and Antonio, 2013

The key to good assessment practice is to understand the tension between assessment purposes 1, 2 and 3. According to Harland et al (2014), measurement and formative evaluation ensure that students are supported in their learning but there is always an impact on students from administrative decisions. These decisions have the potential to override the learning purposes of assessment and grading. Examples of administrative decisions include passing or failing a paper, progression to the next level of study, access to restricted entry programs, the final award of a degree, deciding on a grade point average (GPA), access to scholarships, and how students are portrayed with respect to potential employers or continuing postgraduate study.

The university's primary goals of teaching and learning include assessment. Both formative and summative forms of assessment are used to give students feedback and gauge their level of achievement. It is a process of organizing measurement data results into interpretable forms on a number of variables. This data is usually collected using a wide variety of instruments. Assessment is often used interchangeably with test but not limited to tests. Assessment can focus on the individual learner, the learning community, a course, an academic program, the institution or the educational system as a whole. Assessment provides faculty members, administrators, trustees and others with evidence, numerical or otherwise, from which they can develop useful information about their students, institutions, programs and courses and also about themselves. (Tanyi and Wirngo, 2015).

Since passing and examination or receiving feedback requires a significant amount of learning activities, assessment serves as a controlling function for the learning process in higher educational processes. A change to competence-based assessment is part of the transition to a competency-based program design. That means evaluating the competencies that students have attained in addition to their knowledge.

The university should adopt strategies to ensure quality assessment practices. Such strategies should include training lecturers on test development, item development, banking and usage, item scoring practices and feedback strategies.

Table 2: differentiating traditional assessment approaches with the competence-based approach

Traditional assessment approach	competence-based approach
Key Question Which qualifications have students achieved after completion of the course?	Key question: What should students be able to do? And which competences (subject-specific, social, communicative etc.) do they need?
Assessment content Assessment content refers to the content of the course.	Assessment content Assessment content is defined by the competences to be achieved in the course.
Teacher-centred perspective: Key element of the assessment is the reproduction of knowledge the teacher has taught during the course	Student-centred perspective: The assessment format has to enable the students to show if they have achieved the defined competences of the course.

Source: the researcher(2023)

This information can help them make effectual decisions about student learning and development, professional effectiveness, and program quality (Tanyi, 2014). Assessment is a technique of obtaining information for monitoring progress and making educational decisions on learning outcomes (Akoko, 2015). In the university context and in relation to this study continuous assessment and examinations are used as the instruments to obtain such information. In this study assessment is used to embody the practices of the university lecturers and administrations to collect data on students' performance through the evaluation of the said tests and examinations, analysing and reporting on the data. By assessment, the lecturers engage themselves in implementing a systemic way of gathering, analysing and interpreting evidence to determine how well student learning matches expectations and using the collected information to inform improvement in student learning.

Observing students as they learn, gathering frequent feedback on students' progress and planning small-scale classroom experiments that collect data on how students learn and how they react to different teaching philosophies are all parts of classroom assessment. Individual college teachers can benefit from useful feedback on what, how much, and how well their students are learning

thanks to classroom assessment. The faculty can then use this knowledge to refocus their instruction and assist students in becoming more effective and efficient learners. Assessment is classroom research to provide useful feedback for improvement of teaching and learning. Assessment is feedback from the student to the instructor about the student's learning.

Assessment can only be effective if proper attention is paid on the processes. For instance, lecturers should have a mastery of test development processes to ensure that any assessment tool used at any time is valid and reliable. For this to be achieved, each department should set up panels of experts who develop proofread, review and moderate items for future random use. Once these items have been moderated and in some cases pre – tested, they should be kept in a departmental item bank, ready for future random use. In this case, the examination will be a representative sample of subject domains, with clear instructions and well drafted scoring procedures. Consequently, students' academic performance would be a true reflection of their input and not influence by poor assessment practices.

Assessment is by its very nature a process of expert judgement. The first guiding principle is that assessment relies on professional judgment as its cornerstone, and as such, it requires it in order to properly comprehend and apply all of its components. The first guiding principle is that assessment relies on professional judgment as its cornerstone, and as such, it requires it in order to properly comprehend and apply all of its components. With techniques like automated scoring and multiple-choice test questions, measuring student performance may appear to be "objective," but even these methods are predicated on professional presumptions and values. Making expert interpretations and decisions is the essence of the process, regardless of whether that judgement occurs when creating test questions, scoring essays, creating rubrics, grading participation, combining scores or interpreting standardized test results. Knowing this principle makes teachers and administrators aware of the value of their own and others' opinions in assessing the effectiveness of the assessment and the significance of the results.

Again, evaluation and measurement evidence are based on distinct but related principles for assessment (Sawand, 2015). Evaluation is the interpretation of the description or scores, whereas measurement evidence distinguishes the degree of a trait by description or by assigning scores. Understanding and interpreting descriptive statistical procedures, such as variability, correlation, percentile, standard scores, growth-scale score, norming, and principles of combining scores for

grading, are essential skills for gathering measurement evidence. For tasks like interpreting student strengths and weaknesses, reliability and validity evidence, grade determination, and admissions decisions, a conceptual understanding of these techniques is required (but not necessarily the ability to compute statistics). According to Schafer (1991), cited in Sawand (2015), these ideas and methods are crucial part of the language that educators must know. They also give a common framework for discussing "results," interpreting data, and using it appropriately. Given the prevalence of standards-based, high-stakes, large-scale assessments, this is becoming more and more significant. Evaluation is concerned with the value and merit of the data in relation to a particular use or context. It entails what Shepard (2000) called the systematic analysis of the available evidence. Teachers and administrators need analysis skills to properly interpret data and draw moral conclusions about the significance of the findings, just like students do.

Assessment influences student motivation and learning. Assessment gives feedback to students and this motivates them to learn. Assessment should be authentic with feedback and opportunities for revision to improve rather than simply audit learning, the more general principle is to understand how different assessments affect students. Therefore, when students know that assessment tasks are problem-based or multiple choice items, they become more engaged. Therefore, higher educational institutions should pay attention to their assessment practices.

Assessment also enhances instruction. The type of instruction in the classroom is influenced by effective assessment. When assessment and instruction are combined, teachers are given information about the most beneficial activities and assignments, the best teaching level, and the diagnostic value of summative exams. For instance, informal, formative assessment during instruction activities enables teachers to decide when to move on, when to ask more questions, when to provide more examples, and what responses to students' inquiries are most suitable. When properly interpreted, standardized test results assist teachers in identifying students' areas of strength and weakness for additional instruction.

The assessment practices of the University of Yaounde 1 should be given due considerations. As an internal quality assurance strategy, the students should be assessed using published criteria, regulations and procedures which are applied consistently. Assessment here, involves making every effort for transparent and hitch free examination practices, grading homework, grading group participation and grading group and individual student’s projects. This is because

assessment serves as a means by which the level of student knowledge and achievement is communicated to a variety of stakeholders in a larger world, including potential employers, other academic institutions, and accredited bodies, through the assignment of grades by instructors in the exercise of their judgement. Given the variety of functions that assessments of student performance and achievement serve, they should be dependable, valid, fair, open, and consistent with the goals and objectives of the course or program.

Quality in Higher Education

Quality is defined as conformance to requirements (Crosby, 1979). In other words, quality is conformity to established standards. The British Standards Institute defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy needs (Babalola, Adedeji, & Erwat, 2007). Ajayi and Adegbesan (2007) see quality as the total of the features of a process, product or service on its performance, in customers or clients' perception of that performance. It is not just a feature of a finished product or services but involves a focus on internal processes and outputs. Taking a cue from the above definition, Fadokun (2005) sees quality by three interrelated and interdependent stands: efficiency in the meeting of its goal, relevance to human and environmental conditions and needs and the pursuit of excellence and encouragement of creativity.

An educational definition of quality is that it is an ongoing process that ensures the delivery of agreed standards. These agreed standards should ensure that every educational institution where quality is assured has the potential to achieve a high quality of content and results. Most of the time, quality in education is related with the performance of an institution from its academic staff and with certain kind of information called performance indicators. To ensure quality of education, all university top management must be knowledgeable about the needs of students and academics.

Harvey and Green (1993) classifies the following five dimensions of quality and forms the foundation of the most widely used classification of quality in higher education. This is further supported by Harvey (2006). According to them, quality is categorized as exceptionality or excellence. Harvey and Green's categorization was originally an attempt to deconstruct the abstract concept of quality in the context of higher education, focusing on its various dimensions in order to reconcile different ways of thinking about quality (Santiago et al, 2008). Over the years,

it has undoubtedly become the most influential framework for understanding and discussing quality in the context of educational institutions. Although almost 25 years old, its position remains unchallenged in the field of higher education research, and for that reason, it is adopted here as a starting point for conceptualizing quality assurance. In the following discussions, the different meanings of quality will be substantiated.

Exceptional quality is defined as something special, exclusive, unique, distinctive or self - evident, which is achieved when implicit and intuitive standards of service are surpassed. This traditional conception of quality is of little value in assessing quality in education because it offers no definable means of measurement but it denotes some prestige for the institution. A second aspect of exceptionality is excellence. Quality as excellence is assessed using benchmarks such as amount of institutional revenue, number of Nobel prize winners on staff against which high standards can be evaluated (Kivisto and Pekkola,2017). The third and final notion of quality as exceptionality in some ways dilutes the notion of excellence, defining a high quality product as one that has passed a set of quality checks based on attainable criteria designed to ensure at least minimum quality standards. According to Harvey (2007), this corresponds to what have been described as threshold definitions of quality or, in some cases, benchmark quality, implying minimum benchmarks or minimum quality standards rather than the excellence benchmarks discussed above.

According to Harvey (2007), Quality means perfection or consistency. This notion of quality emphasises flawlessness and reliability in delivery service inputs. Good quality means delivering the service on time and without faults or errors and consistently too. Beyond conforming to pre – defined and measurable specifications, the absence of defects approach also embodies a philosophy of proactive prevention rather than retrospective inspection. The focus is on ensuring at each stage that faults do not occur rather than subsequently identifying defects (Harvey, 2006). As part of the conception of quality as perfection or consistency, an organizational quality culture increases collective commitment to getting things done right and well at the first attempt. This democratises quality by making everyone responsible for service quality at each stage of the production process.

Quality as Fitness for Purpose

Quality can also be thought as suitability. The idea of "fitness for purpose" emphasizes the need to adhere to generally accepted standards, such as those established by an accreditation or quality assurance body, with the emphasis being on how effectively the processes in place at the institution or program help it achieve its stated goals. Fit for purpose, which equates with meeting a requirement or expected results, can be interpreted in one of the two ways. First, it can be seen as primarily being about satisfying customers, or doing what is necessary to meet their needs and expectations. For example, students who immediately find employment after graduating, which is the main goal of education, can be considered to be primarily satisfied customers. Despite their university's lower ranking, the fact that exams aren't graded right away, or the fact that their instructors lack adequate pedagogical skills, they believe their educational experiences to be of the highest caliber. Second, an institutional viewpoint can also be used to understand fitness for purpose. According to this definition, a high quality institution is one that is effective in achieving its goals and clearly articulates its mission. In this way, fitness for purpose can also be linked to the concept of effectiveness, referring to university's capability in achieving organisational outcomes (Politt and Bouckaert, 2004).

Quality as Value for Money

Quality is also considered as value for money. Here, the output to input ratio is the main concern in an effort to increase efficiency. This is comparable to the return on investment strategy, in other words (Mathei and Iwinska, 2016). When a better or higher educational outcome can be obtained at the same cost, or when the cost can be reduced while the outcome level is maintained, quality has been attained. To get the most out of the use of the resources at hand, value for money weighs the costs of producing the service against the quality of the provision, the processes, or the results. Quality, according to Cheng (2016) is linked to cost and economic exchange and originality denotes that customers are willing to pay more for better quality. However, what customers value most is superior quality for the same price or even less. This strategy is closely related to the idea of efficiency, which refers to the ability to produce a given quantity and quality of services at a lower cost or a greater number of services using the same amount of resources. According to Neidemeier (2017), quality is measured by its efficacy and efficiency.The highest level of quality

is reached when no higher amount and standard of teaching, research or service outputs is achieved with existing inputs. In this case, the concept of quality is explicitly connected to accountability.

According to Tendongmoh (2021), the notion of accountability is the central machinery of this interpretation of quality as the value of money and it shares the principle of cost-benefit analysis in which case it is expected that the amount invested in education should be responsive to the satisfaction derived by the learners on one hand and on the other hand, that education should contribute in the country's economic development.

Quality as Transformation

Finally, quality can also be seen as transformation. Quality as transformation involves a process of qualitative change from one state to another (Harvey and Green, 1993). Transformation as a process of transmutation can apply to an individual or an organisation or to the service supplied by the organisation. For instance, in an educational setting transformation refers to the enhancement and empowerment of students or to the development of new knowledge through research. As such, it can also refer to changes within an institution that better enable it to provide transformative learning or research (Harvey and Knight, 1996). This can also be closely linked to notions of added value of the provided service (Harvey, 2006).

This approach which looks at learning that is centred on the student, views quality as value-added and transformation and empowerment of a student through the learning process (Mathei and Iwinski, 2016). In this scheme, quality is achieved when the learning proves transformative for the student.

Quality as Perfection

Quality is also described as perfection or consistency. This approach sees quality as a process to eliminate defects and aiming for consistent of flawless outcome. In this view, quality can be attained by all and by focusing on consistency. As perfection, quality relates closely with the notion of zero defect. Considering the zero defect perspective and from the higher educational point of view, the interpretation of quality as perfection becomes problematic for two reasons. First, it is difficult to describe a university product as being perfect or has zero defect due to intrinsic

attributes and secondly, it is difficult to define a zero defect or perfect graduate of an educational process.

However, the perfection concept of quality is important in higher education because it drives the teaching and learning process towards perfection. This is important because universities have to be consistent with its quality assurance strategies. The University of Yaoundé 1, therefore needs to be consistent in its efforts to maintain quality.

Quality as the Virtue of Professional Practice

The promotion of academic professionalism and students' dedication to their studies is facilitated by quality as the virtue of professional practice. Julia (2001) argues that moral virtues are personality traits that consistently result in positive outcomes in contemporary virtue ethics. Quality is defined by its value for fostering stakeholders' intrinsic excellence and motivation to learn in a professional manner and to teach in a professional manner (Cheng, 2006). It focuses on how to achieve high quality education by helping students and academics develop intrinsic values of teaching and learning. Academic staff and students must cultivate virtue in their practice as a consistent effort to do nothing but the best because they are active participants in improving the quality of university education. In order to strengthen academics' professionalism and to develop students' capacity to become consciously engaged in the process of continuous improvement in university education, it emphasizes the need to respect the subject-centered nature of teaching and learning.

Quality as a virtue of professional practice involves more than a momentary action, but a persisting self- motivation to learn and to work, and to enjoy the state of being an academic or a student. By selecting the teaching and learning process, we are expressing our perspective on what is important to us and the type of learner and academic we want to be. This characteristic thus contributes to the value of higher education, the worth of participation, and the enjoyment of learning. Quality is reflective in that it enables academics and students to understand their goals, their accomplishments, how they achieved those goals, and whether there is room for improvement (Cheng, 2016). In other words, a quality evaluation system that encourages and increases academics and students' commitment to teaching and learning is embedded with a trust in academic professionalism, students ' capacity for learning and quality. Quality as a professional

practice virtue depends on an individual's capacity and willingness to control their own behavior in accordance with their commitments and values. It largely depends on the importance of the goals that students and academics strive to achieve through their university education. Quality as a professional virtue largely depends on what academics and students value and what they hope to get out of a university education. It is beneficial to those who pursue it, as Socrates, Plato and the Stoics held that the nature of virtue makes its possessor a happy or flourishing person. In higher education, a virtue of professional practice will make academics and students develop their confidence and self-knowledge of who they are, what they aim to achieve, and how they should act towards this. They will therefore become confident, open-minded, and have a strong sense of self- worth, and appreciate what they have and what they want to do.

Quality Education

According to Mosha (1986), the degree to which a recipient of education can think clearly, independently and analytically in order to solve pertinent societal problems in any given environment is a measure of the quality of that education. Comparative and global competitiveness of educational products are crucial aspects of education quality, according to Adegbesan (2011). In a more comprehensive manner, Maduewesi (2005) views educational quality as encompassing learning content, learning environment, and learning outcomes. Additionally, Ciwar (2005) considers the admissions policy to be a measure of quality. Indicators for supervision, teacher quality and facilities are also included. The quality of education is also reflected in course content and exam item quality. Quality is indeed simply, the foundation of education. When receiving and dispensing higher education, quality of instruction is the defining characteristic guiding students and institutions of higher learning.

Article 11 of the World Declaration on Higher Education, which was published by the United Nations, states that quality in higher education is a multi-dimensional concept that should include all functions and activities , including teaching and academic programs, research and scholarship, staffing, students, buildings, equipment, services and academic environment. It should take the form of openly conducted internal and external reviews by unbiased experts, ideally with international experience, which are crucial for raising quality. Higher education must also have an international component that includes knowledge sharing, interactive networking, teacher and

student mobility, and international research projects, all while taking into account local cultural norms and conditions.

Therefore, fairness and equity in higher education also apply to issues like who can enroll, who can graduate, and what kinds of careers are available. Quality issues are also impacted by ethical considerations, such as how academics and students are treated in universities and how they interact with one another. For any nation to develop, high-quality education is essential. How could universities contribute to a nation's economic advancement and reputation abroad if they perform poorly? The state authorities must have a system in place that allows them to access data about university quality on a regular basis and take or support actions to improve performance as needed.

Quality Assurance in Education

The process of maintaining standards in goods and services through sample inspection or testing is known as quality assurance (Ramson-Yusuf, 2005). According to Okebukola (2010), quality assurance is a general term that refers to a variety of initiatives aimed at enhancing the caliber of higher education system's inputs, processes, and outputs. Enhancing learning and teaching, fostering trust among stakeholders across higher education systems, and advancing harmonisation and comparability in higher education are just a few of the many functions that quality assurance itself serves.

In accordance with this, Ayodele (2007) argues that quality assurance includes the standard of the teaching tools that are available, as well as the standard of the school’s infrastructure, students’ curriculum and teachers. According to Oyebode, Oladipo, and Adetome (2008), quality assurance is intended to demonstrate and enhance the caliber of an institution's practices, educational materials, and results. To ensure education quality assurance, everyone has a part to play. In order for the entire sector to develop stronger operating policy procedures that are well documented and adhered to, it is essential to develop minimum standards for the qualification of teachers, the quality of instruction, expected academic achievement of students, and the development of a more rigorous management process for education. With time, this will develop into a total management system for higher education in line with which is practiced internationally.

In higher education, quality control is practiced throughout the entire teaching and learning process. Admissions screening, staff hiring and advancement processes, curriculum reviews,

teaching and learning resources, the standard of research, mechanisms for developing policy, student evaluations of staff, external examiners for semester or end of year examinations, tracer studies, academic reviews, and audits are all included. Each university is required to establish its own quality assurance panel in order to accomplish this. The process of maintaining and enhancing educational provision's quality, equity, and efficiency is known as quality assurance. It includes student assessments, teacher and school leader evaluations, external evaluations of the school, and self-evaluations of the institution.

Quality assurance therefore refers to the deliberate, evidence-based strategies and processes of satisfying quality expectations. This is based on the processes, environment and product (Okoji, 2013). Furthermore, Ajayi and Adegbesan (2007) argue that, quality assurance is related to accountability both of which are concerned with maximizing the effectiveness and efficiency of educational systems and services in relation to their contexts and their mission.

According to Fadokun (2005), quality assurance encompasses all of the attitudes, objectives, actions and procedures that when present and used in conjunction with quality control procedures, ensure that appropriate academic standards are upheld and improved within and by each program. A planned and systematic evaluation of a program or institution to see if acceptable educational standards are being met, upheld, and improved is known as quality assurance. A tertiary institution should be as good as its quality of teaching, therefore quality assurance ensures effective teaching.

Refering to Onyessom and Ashibogwu (2013), quality assurance (QA) is a concept that refers to performance metrics created by authorities for evaluating the effectiveness of educational institutions with the goal of ensuring that the learning outcomes meet the needs of each society. Quality assurance can also refer to established practices, systems, and processes that support and guarantee the efficient provision of educational services (Kontio, 2012). Additionally, quality assurance is seen as a powerful tool in policy circles that enables decision-makers to identify the country's educational needs, evaluate novel problem-solving techniques, and assess the success of policies and strategies (Asian Development Bank, 1996).

In the view of Kontio (2012), quality assurance refers to all policies, procedures and systems that advance higher education’s curriculum and initiatives. According to Kontio, quality assurance and

auditing are two strategies for assisting education in raising the standard of its delivery. The overall goal of quality assurance is to prevent issues, maintain stability, and enhance goods and services.

Quality assurance in education is the means by which an institution can guarantee with confidence and certainty that the standards and quality of its educational provision are being maintained and enhanced (Friend-Pereira, Lutz and Heerens, 2002).

Relevance and Benefits of Quality Assurance in Higher Education

Yankson (2013), cited in Anane and Addaney (2016), asserts that the purpose of quality assurance in universities is to reassure society that the standards for higher education are adequate and that they are competitive on global scale. Therefore, there has been a lot of emphasis on the total autonomy given to universities in exchange for their passive service, and as a result, the public is demanding more accountability. Due to this, university administration will encourage the quality assurance unit to hold stakeholders to some level of accountability. By doing this, university management should incorporate quality assurance practices into all of its decision-making processes. This will meet quality assurance standards and consequently provide a clear visibility of quality education.

University quality assurance is important because it satisfies various stakeholders while upholding academic standards. This is only possible if the quality assurance units measure the relevant information for the stakeholders in an understandable way. According to Anane and Addaney (2016), the quality assurance unit is tasked with assessing university activities to make sure they adhere to national and international standards, developing specific protocols and procedures to govern all core and support processes vital to quality assurance activities, and enabling the university to assess its strengths and weaknesses and implement interventions to improve academic quality.

Quality assurance (QA) enables a university and its members to bring internal benefits to the university and its staff. Additionally, it contributes to the students' external benefits and the institution's reputation. Once more, QA enables the university and its staff to continuously improve the university's students and work, meet accountability and accreditation requirements, improve the university's reputation, and satisfy external demands for proving quality, quality assurance, and quality enhancement.

Quality assurance helps the university to define, explain and articulate its mission, vision, goals and objectives as well as how those relate to others throughout the university. Additionally, it aids the university in recognizing its special and distinguishing qualities. This can aid in positioning itself for the hiring of new employees and students and for staff orientation. These may also be employed for promotion.

Quality assurance is developmental and can enable the relevant parties to receive feedback and take action as a consequence of the feedback, setting collective priorities, and disseminating good practice. The university can identify needs and resources, create and carry out action plans and monitor as well as evaluate their own performance and that of their colleagues, students and the work they do. Through regulation, self-regulation, and self-organized development, it enables the university to assess its strengths and weaknesses in its work, address staff needs for ongoing professional development, and improve staff professionalism. The university can intervene where necessary to improve the quality of the work, the performance of the staff and students, student learning, and achievement of the intended outcomes of the work thanks to quality assurance.

QA contributes to the ongoing processes of assurance and enhancement of quality in the work of the university, its teaching, learning, student assessment, evaluation and student outcomes over and above the other mechanisms and their reporting cycles that may exist for reviewing and improving the work. Understanding the processes that led to the outcomes will help the university conduct systematic inquiry into the nature and significance of the academic, research, and teaching work of its faculty, staff, and students. This will allow the university to make improvements where they are needed. In addition to other possible mechanisms and their reporting cycles that may be in place for reviewing and improving the work. Quality assurance contributes to the ongoing processes of assurance and enhancement of quality in the university's work, including its teaching, learning, student assessment, evaluation and student outcomes. It aids the university in determining whether appropriate and efficient procedures and mechanisms for quality assurance are in place, and that these are functioning to guarantee that the institution's intended goals are being met, to serve as a tool for accountability, and to recognize best practices within the organization.

QA is also relevant to higher education from a leadership and management perspective. In this direction, QA enables relevant parties to cultivate and conduct evidence-based decision-making and leadership, develop collaborative and collegial practices and improve morale. The

stakeholders are better able to understand the university's mission and goals as well as its unique strengths, successes, needs and long term plans for work and accountability. Through QA, concerned parties would be able to pinpoint institutional areas of shared interest and connect specific staff members with pertinent resources both on and off campus. It would allow them to make sure that the work is in line with not only its own goals, objectives, and intended learning outcomes, but also with those of the institution's strategic direction. It would enable the stakeholders to enhance communication, improve morale and a sense of working towards a common aim of the institution by enhancing the efficiency and effectiveness of institutional structures.

External Quality Assurance (EQA)

The eternal quality assurance (EQA) system concerns regulations, policies and practices that take place at the national higher education system level to assure quality of higher education programs and institutions. Programs and higher education institutions are both given attention in some external quality assurance systems, while in others it may only be one or the other. A dedicated organization is typically in charge of ensuring the quality of higher education institutions or programs at the external quality assurance level. These organizations can include accrediting agencies, evaluation agencies, quality assurance units, and other similar organizations, as well as the bodies in charge of the superordinate, external quality assurance of these agencies themselves, depending on how the quality assurance framework is designed.

External quality assurance refers to the actions of an outside body, such as a quality assurance agency for a different organization from the institution that evaluates the institution's operation or program to see if it complies with the standards that have been established (Banji, 2000). It also refers to the assessment of a university's operations or of its program by an outside organization, such as a national quality assurance agency or a body like a professional association, to determine the degree of compliance with predetermined minimum standards. As previously mentioned, external quality assurance is primarily accomplished through the use of accreditation and entails a self-study, peer review, and a reporting system.

It is argued that improvement can be difficult to achieve through external quality assurance approaches, regardless of the official balance between the accountability and improvement

functions and roles of the system (Westerheijden, 2007). This is based on years of practice and experience in quality assurance. Harvey (1996) makes the case that an external quality assurance strategy in higher education is likely to ultimately result in a compliance culture in this regard. Instead of enhancing quality, the academic staff may abide by external quality assurance procedures to reduce disruptions. It is also criticized for not being able to adequately address problems pertaining to the actual student learning experience.

Quality Control (QC)

Quality control refers to the formal and informal verification processes that institutions use to ensure that quality and standards are maintained at the desired level. A system used to maintain a desired level of quality in a good or service can also be referred to as quality control (QC). It involves the systematic monitoring of numerous variables that have an impact on the product's or service's quality. It is a continuous process that typically aims to uphold standards in order to meet predetermined goals.

Control simply refers to the procedure used to establish and uphold standards. This process entails observing how well our activity is going, comparing it to some standards, and acting if the observed performance deviates too much from the standards. In order to provide students and other stakeholders with services that meet expected quality standards, quality assurance takes a comprehensive approach that covers every process in a higher education institution. The management of higher education institutions must support the quality assurance system for it to be effective. In order to ensure that all quality requirements are met and performance issues are resolved, processes are monitored as part of quality control.

Quality Culture

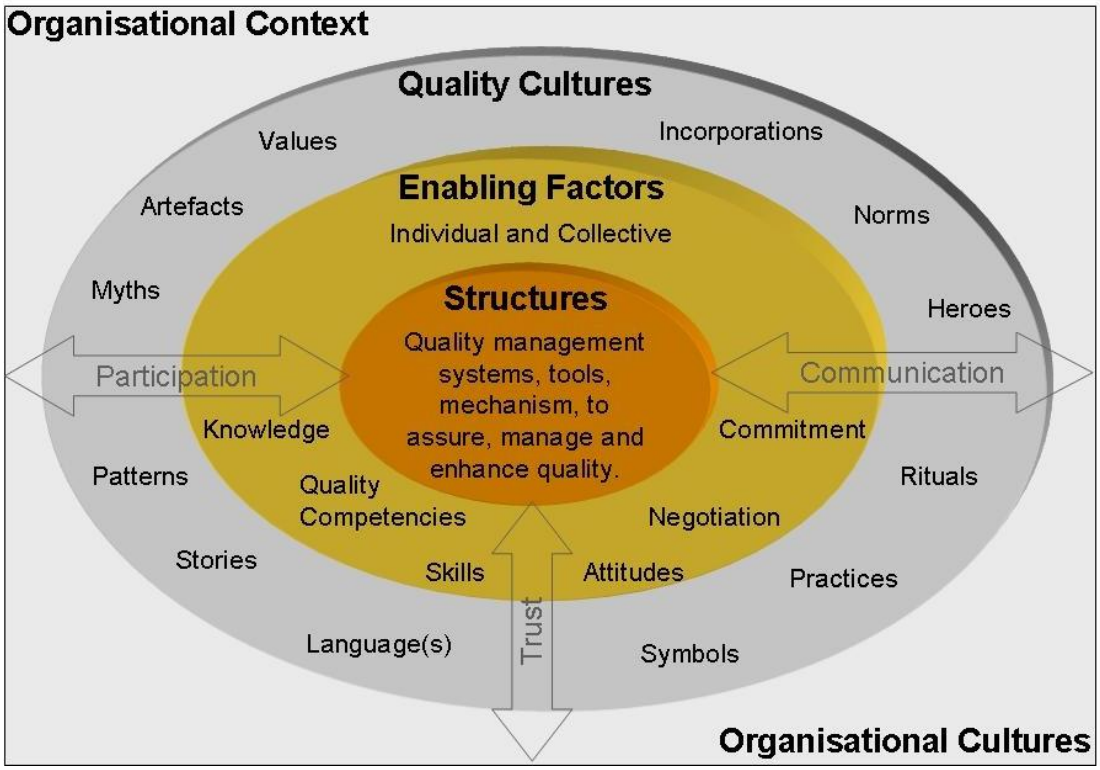
According to Kottman et al (2016), quality culture is organizational culture that intends to enhance quality permanently and is characterized by two distinct elements which are cultural or psychological element of shared values, beliefs, expectations and commitment towards quality and the structural or managerial element with defined processes that enhance quality and aim at coordinating individual efforts. The development of highly effective internal institutional quality assessment mechanisms and ongoing implementation of the findings constitute quality culture. According to Friend-Pereira, Lutz, and Heerens (2002), a quality culture refers to an organization's

capacity to integrate quality assurance into its routine operations. This marks a shift from periodic evaluation to ingrained quality control. According to Harvey and Stensaker (2008), quality culture is viewed as a tool for posing questions about how things operate, how institutions operate, with whom they interact, and how they view themselves. Each university must make the pursuit of quality an overarching value in all of its operations in order to establish a quality assurance system.

Higher education's commitment to maintaining and developing equality over the long term is referred to as having a quality culture. Institutional quality assurance must work toward creating a quality culture that prioritizes the learner and is characterized by partnership and cooperation. A good culture promotes collaboration and experience sharing. Supporting the individual as an independent scholar is important, but not at the expense of the learning community. Between the community and the individual learner, there is a symbiotic relationship. Institutional leadership in a culture of quality is inspirational rather than authoritarian and it exists at all levels of the organization, not just among senior managers like the Vice Chancellors, Registrars and Deans as well as other individuals such as the Heads of Departments. A high-quality culture welcomes external criticism from a range of sources, including formally conducted evaluations from outside parties, critical friends from outside parties, and internal peer review and support. A quality culture is fundamental to quality assurance because it promotes and facilitates self-reflection and reflexivity, creating and putting into action improvement initiatives.

Based on Mary Douglas' grid-Group Scheme, four ideal types of quality cultures can be defined as follows. There is also the responsive quality culture, which focuses primarily on assessing one's own practice in light of external quality standards and advancing an improvement agenda. The second kind of quality culture is referred to as reactive quality culture, and it is centered on avoiding external threats like bad reputation and sees quality as something that is imposed from outside the environment. A learning organization's regenerative quality culture, in which quality is systematically integrated into day-to-day operations, is another factor. The following one is reproductive quality culture, which places a strong emphasis on upholding the status quo.

Figure 3: Model of quality culture in education



Source: adapted from Ehlers (2009)

The various elements of a quality culture are represented in a model culture for education in figure 2 above. It builds on existing research and models while also paying close attention to quality and education. It is a conceptual and structural model that identifies and links the structure and various elements of the concepts of quality culture. It is not a flow graph because it does not clearly indicate the impacts or effects that the various components have on one another. The various elements are described in depth and connected to earlier research in the sections that follow.

Quality culture is important in quality assurance because no matter what quality assurance strategies an institution adopts, without a clear and grounded quality culture, all efforts will end in vain. Therefore, institutions should strengthen quality cultures in their various universities. According to Elhers (2009), a quality culture in higher education should ideally consist of the following : a structured element that represents the organization's quality system, the enabling factors that represent the factor that help organizations incorporate quality regimes into their cultures and the quality elements that represents the organization's manifested artifacts,

symbols and rituals. Transversal elements, which connect various components through participation, trust, and communication, should also be developed. According to the EUA's framework, structural dimensions that include embedded quality, management strategies and policies, training and development, clear responsibilities, communication, implementation mechanisms, and stakeholder involvement are components of quality cultures in teaching and learning in higher education. Additionally, there are psychological dimensions that include effective, supportive leadership, shared values, staff ownership and commitment as well as cultural dimensions that include components of already existing cultures.

Quality Enhancement

Quality Enhancement is the process of positively changing activities in order to provide for a continuous improvement in the quality of institutional provision. In contrast to quality assurance, which is primarily concerned with whether goals and objectives have been achieved, quality enhancement focuses on improvement. Quality enhancement is the process of raising educational quality through iterations of ongoing innovation and improvement so that it becomes ingrained in the organizational culture of the educational system (Harvey, 1993). Harvey (2004) defined quality enhancement as an augmentation or improvement process in his analytic glossary. It has two main components: improving individual learners' attributes, knowledge, abilities, skills, and potentials; and enhancing these components. Second, it pertains to raising the standard of a facility or academic program.

According to Brown (2014), when pedagogy is improved through research, benchmarking, quality assurance and other exchanges of experience and practice, it is said that the quality of education has been enhanced. Between assurance and enhancement, there is not much of a difference. Newton (2013) suggests that quality assurance is taken to be a deliberate process to check, evaluate, and pass judgment on quality and standards, acknowledging convergence and divergence in debates concerning assurance and enhancement. It may also indicate directions for enhancement and improvement. Quality assurance is viewed as a deliberate process of change that leads to improvement.

Quality enhancement is defined in term as of process, aims, how it functions, how it is perceived, what underpins it and what characterises it most in terms of time and space (Gunn and Cheng,

2015). It is a formalized, formative process that systematically includes the maturation of academic teachers, disciplinary participation in curriculum-level discussions, the improvement of learning and teaching regimes, the implementation of change, and management of the larger institutional environment. Its overarching goal is to enhance student learning outcomes across a range of domains, including learning gains, social integration, and satisfaction perceptions. It must be seen as cost-effective and able to convince various audiences, including high-caliber professionals, academics, students, and external stakeholders, that it is reliable and worthwhile.

Evaluation

Evaluation simply refers to figuring out what something is worth. Tanyi and Wirngo (2015) define evaluation as the methodical determination of a subject's merit, worth, and significance using a set of standards-based criteria. Tuckam (1995) defines evaluation as the process of determining whether the components, procedures, or results of a program are satisfactory, particularly in relation to the program's stated objectives or own expectations or standards. It can also mean interpreting and analyzing behavioral changes, such as how this student's behavior has changed in comparison to prior knowledge (Akoko, 2015). Evaluation, according to Crombach et al. (1980), is the systematic analysis of events that take place within and have an impact on contemporary programs.

Some authors define evaluation as the qualitative aspect of determining the outcomes of learning while others see it as the process of ranking with respect to attributes or traits. On the other hand and according to Nworgu (2015), evaluation is used to connote the process of making value judgements or making decisions about events, objects or characteristics. In this sense, evaluation is purely qualitative and is preceded by measurement. Measurement makes available the pertinent information and evaluation judges the worth or value of that information. From studies by Mkpaie (2014), evaluation involves such activities as gathering of valid information on attainment of and fashioning information to aid judgement on effectiveness of an educational program.

The main objective of evaluation is to identify the limitation and inconsistencies in the teaching and learning processes. The main goal of evaluation is to rank students against one another in terms of their academic progress and learning. The instructor can determine through evaluation whether the students' academic performance is in line with their grade levels and academic standards.

Additionally, evaluation is done to support student learning and determine whether the curriculum is helping students gain new skills and knowledge. There are many different types of evaluation procedures used in higher education institutions. In addition to carrying out their tasks, these procedures must make sure that they effectively support student learning so that they can achieve both their personal and professional goals and develop into contributing members of the society.

In higher education, evaluation procedures are crucial components that should be developed by the lecturers in conjunction with other faculty members. It is crucial to take into account the educational programs, student needs and requirements, academic subjects, academic objectives, and overall educational system when formulating evaluation procedures. In institutions of higher learning, like the University of Yaounde 1, professors employ evaluation procedures by assigning homework, classwork, written exams, presentations, and group discussions. They also use continuous assessment, formative evaluation, and summative evaluation.

In this study context, evaluation simply means the addition of value to student's scores carried out by lecturers after class tests, group assignments and semester examinations. This is usually done after the live examination of the tests and examination during each semester. For the purpose of grading and reporting, evaluation makes use of techniques and metrics to assess student learning and comprehension of the subject matter. An instructor's feedback on a student's progress is called an evaluation. Each student's responses to this exercise are scored or quantified, and the scores given to the students reflect their performance. The lecturers of these two universities hardly use the multiple choice questions (mcqs) which are scored dichotomously but most of them use the constructed response or essay questions on which the students' responses are evaluated by them or their proxies according to the rubrics wherein each score point is defined.

Quality Assessment

The process of external evaluation of the caliber of educational provisions in an institution, particularly the level of student experience is known as quality assessment. Quality assessment is the data collection and analysis through which the degree of conformity to predetermined standards and criteria are exemplified. If the quality, through this process is found to be unsatisfactory, attempts are made to discover the reason and take actions. Tanyi and Wirngo (2015) claim that the ability to conduct high-quality assessments has become a pre-requisite for educators because doing

so necessitates mastering the specialized knowledge and abilities associated with assessment and evaluation.

Quality assessment is the data collection and analysis through which the degree of conformity to predetermined standards and criteria are exemplified. If the quality, through this process is found to be unsatisfactory, attempts are made to discover the reason for it.

Quality assessment can also be viewed as assessment practices that are qualitative, valid, reliable, fair and ethical. The degree to which theoretical justifications and empirical evidence support the sufficiency and appropriateness of inferences and actions based on test results or other modes of assessment is referred to as validity. One that measures what it is intended to measure is a valid assessment method. For instance, when writing abilities are unrelated to the subject being assessed, an assessment shouldn't grade someone on the caliber of his writing. All three types of validity evidence should be taken into account in order to be confident that a test is valid (and, consequently, that the inferences we draw based on the test results are valid). Reliable assessment are consistent in their methods and criteria because they yield the same results on subsequent tests and when tested on cohort of students that is similar. The items' internal consistency can be used as an additional indicator of reliability. You should be able to assume that if a student gets one question on a quiz about solving quadratic equations right, he will get other, similar questions right as well. A good evaluation is impartial and moral. Fairness in assessment refers to the lack of bias, treating test takers fairly, achieving parity in results, and providing students with the chance to learn.

The development of quality assessment systems is required for quality assessment to be efficient and support quality assurance in higher education. The stakeholders should make sure that quality assessment programs are put in place in their organizations. The implementation of a system that allows quality assurance of universities in terms of their reputation by quality assessment system, which includes peer evaluation, in terms of their resources, including evaluation of students and teachers, equipment, spaces, and management system, and in terms of results, including evaluation of teacher publications, project participation, and performance, is the result of quality assurance having become a top concern for the government. Each university should conduct a quality assessment of its own undergraduate and graduate programs using assessment procedures as a tool to manage and enhance the standard of instruction and processes that support it.

Quality Audit

The process of examining institutional practices for ensuring quality and standards as well as whether the arrangements are successfully implemented and have met their stated goals, is known as a quality audit. Education Quality Audit is a system where the entire system is checked to determine the validity and authenticity of the institution's norms, philosophy, and the input given to stake holders of the Institute in relation to parents and students. The audit's objective is to determine whether HEI's internal quality assurance is effective, efficient, and cogent and whether it adequately supports HEI's overall development, mission, and all of its activities.

The underlying purpose of continuous audit is to establish the extent to which institutions are discharging effectively their responsibilities for the standards of awards granted in their name and for the quality of education provided to enable students to attain standards. An institution or program is being audited to see if its infrastructure, staff and curriculum adhere to its stated goals and objectives (Maateru, 2007). It is a comparison of a program or institution to its own objectives, standards, and stated goals. The success of the institution in achieving its objectives is the main focus of the assessors. An audit focuses on how institutions and programs are held accountable and typically includes a self-study, peer review, and site visit. Such an assessment may be self-managed or carried out by outside organizations. The primary distinction between an accreditation and an audit is that the latter places more emphasis on the institution's compliance with external, typically national standards. Audits focus on an institution’s own standard and goals and the success in attaining them.

The purpose of any audit is to promote the culture of quality and continuous improvement of the quality assurance system. By encouraging the autonomy of higher education institutions in terms of institutional viability and the growth of quality cultures, this promotes the overall development of a higher education institution and the achievement of higher education in general. By fully accepting responsibility for quality assurance, the institution accomplishes its strategic goals.

According to Patel and Patel (2009), there are ten benefits of quality audits. Higher education needs quality audits because they take away obstacles to continuous improvement, move activities from reactive to proactive levels, collect information for bettering quality systems, and enable a critical review. Additionally, it emphasizes the development of existing skills and the acquisition

of new ones, and it offers information for decision-making. The focus of a quality audit is on what we are doing, how we are doing it, why we are doing it this way, and can we do it better? It facilitates self-evaluation.

There are two types of quality audits. These are internal and external audits. An organization performs external audits on a quality system that is not directly under its control, is not part of its organizational structure, and whose outcome it has no interest in. This is typically carried out by reputable organizations, and they adhere to the same guidelines as internal audits. External audits are conducted to ascertain compliance with established rules by looking at the records of internal audits. Internal audits are those internal quality controls that are carried out within the organisation. They are essential for organisational continuous improvement. There are two types of internal audits such as internal system audits such as internal performance audits. Internal system audits consist of an ongoing supervisory surveillance of the quality assurance practices of subordinates. For example, use of periodic note book checks to ascertain effectiveness. Internal performance audits consist of reviewing the ongoing quality assessment program especially in a laboratory.

Academic Performance

Academic performance is the measurement of students' performance in various academic courses or subjects. Normative test scores, graduation rates, and classroom performance are the typical metrics used by educators to assess student achievement. According to the new Cambridge Advanced Learner's dictionary, performance is a noun that describes how well a person or machine does a piece of work or an activity. Performance is the accomplishment of a given task measured against pre-set standards of accuracy, completeness, cost and speed. Performance is defined as a person's or animal's observable or measurable behavior in a specific circumstance, typically in an experimental circumstance. Academic performance is defined as the accomplishment of a goal in a way that guarantees the performer has met the objectives in the context of the given educational level. An academic certificate must always be presented along with performance in order to verify that the student has successfully completed the grade or course and has earned the stated grades.

Academic performance can be observed from evaluation. So through the evaluation criteria, academic performance is presented as the level of proficiency seen in certain tasks that the student is able to perform (Lamas, 2015). It can also be observed on the grade point average (GPA) score

of the student at the end of an academic year or semester. In this study, performance and achievement are used interchangeably. The indicators of academic performance are marks scored and grades as awarded by various lecturers at the end of each course, results from standardized tests, classroom performance, employability, knowledge gained and graduation rates. A pass is 50% per course and any mark below 50% is considered a failed mark.

According to a number of authors, academic performance is the real result of learning that is generated by the student and is stimulated by the teaching activity of the teacher (Lamas, 2015). Martinez (2007) claims that a student's academic performance is their own creation and is typically measured by their school grades. According to Caballero et al. (2007), academic performance entails achieving the goals and objectives established in the course or program that a student is enrolled in. These are demonstrated by grades, which are the outcome of assessment. Higher education institutions have long been interested in student academic performance and graduation rates, which has drawn research to the subject. As a result, numerous studies have been conducted on the subject, some of which claim that factors such as learning styles, gender and race have an impact on students' performance, while others mention the role of grants, the completion of advanced placement courses in high school and family income level as having statistically significant effects on first generation college students' persistence in college (Hanson, 200).

In this study, students' academic performance at the University of Yaounde 1 constitute the overall performance of students at the end of each semester, academic year and graduation year. So, it is the measurement of students' achievement across various academic subjects and teachers usually measure achievement using classroom performance, group presentations, semester examinations, graduation rates and results from standardized tests. Students' academic performance at the university is determined by all of the above and is graded on a scale of

Table 3: showing the scoring and assessment grid for the University of Yaounde 1

SN	Mark on 20	Mark on 100	Grade	Grade Point average (GPA)	Distinction
1	16+	80+	A+	4	Excellent
2	15-15.8	75-79	A-	3.70	Very Good
3	14-14.8	70-74	B+	3.30	Good

4	13-13.8	65-69	B	3.00	Fairly Good
5	12-12.8	60-64	B-	2.70	Above Average
6	11-11.8	55-59	C+	2.30	Average
7	10-10.8	50-54	C	2.00	Pass
8	09-09.8	45-49	D+	1.70	Below Average/failed
9	08-08.8	40-44	D-	1.30	Failed
10	06.8-07.8	34-39	E	1.00	Failed
11	00-05.8	0-29	F	0.00	Failed

This table shows the student performance grid for the University of Yaoundé 1 showing that students who is classified as excellent scores above 80% to 100% which is 16 to 20 on a scale of 20 and obtains a GPA of 4 on a scale of 4. A pass mark therefore, is 50% and above and any mark below this is considered failed and the student asked to repeat.

Standards

Standards define the levels of achievement that can be used to compare performance. A measure of fitness for a specific purpose is typically implied by the attainment of a standard. Every time the term "standards" is used, it means that something has either met a certain standard of excellence or is good enough to serve its intended purpose. The term "standards" in education refers to both the explanation of what is to be taught and learned as well as the outcomes of assessments. Both national and international standards may apply in this situation.

Educational standard defines the skills and knowledge that students have at critical stages of their academic careers. The National Research Council (2001) states that as educators and policymakers respond to the call for a precise definition of desired outcomes of schooling and a way to measure student success in terms of these outcomes, standards serve as the cornerstone of educational reform across the country.

The British Standards Institute (BSI, 2018) refers standards as instruments which provide trustworthy basis to the people who have the same expectations about a product. Therefore,

educational standards are defined as indicators that allow educational institutions to reach certain targets in various aspects and not fall below specific targets.

In a variety of ways, the advancement and development of education depends on educational standards. For instance, educational standards put to the test and allow for evaluation of educational expectations. They are essential in ensuring that teachers and students have the knowledge and abilities necessary for success in terms of standards and parental expectations for students. According to the Great Schools (2015), education standards assist teachers and students in acquiring the knowledge and skills necessary for success as well as allowing them to concentrate on the objectives that must be learned. Educational institutions can assess themselves using the standards, describe their current situation, and identify the areas that need to be improved. In this context, standards provide criteria to evaluate whether the progress towards a national target in Science learning and teaching is ensured or not. Standards in education offer a common language for reforming studies.

Standards guarantee improved accountability. It gives educators the chance to play a role in overseeing what happens in the classrooms. A higher level of learning is ensured through the practice of aligning learning to standards. Teachers are kept on track and guided during the assessment process by standards. In order to guarantee the caliber of its teaching and learning, the University of Yaounde 1 must set standards.

The concept of standards is important in this study in several dimensions for any university institution like the University of Yaounde 1 to achieve it set goals and quality. For instance, standards establish precise, quantifiable objectives. By doing this, standards help teachers understand the competencies and knowledge that students should possess as well as the intended outcomes of a course of study. The objectives that educators must strive for are guided by standards. Standards also influence instruction. Curriculum, assessment, and professional development are all intended to support and advance standards. Thirdly, standards aid in measuring achievement, and it is the responsibility of the authority to assess the success of set objectives..

Accreditation

Higher education institutions and or their programs are examined for quality standards and the need for quality improvement through the self-study and external quality review process known

as accreditation (Materu,2007). An external body (the accrediting agency) evaluates the services and operations of educational institutions or programs as part of the accreditation process to ascertain whether the relevant standards are met. The process of accreditation is also a status. The procedure is intended to ascertain whether or not an institution is carrying out its stated mission and accomplishing its stated goals, as well as whether or not it has met or exceeded the published standards for accreditation. Typically, external organizations like the government or national agencies for quality set these published standards. Peer reviews, site visits, and self-evaluation are frequently included in the process. An educational program or institution that satisfies predetermined quality standards is granted accreditation. It's a form of acknowledgement that a program or institution has met certain requirements. It is actually the awarding or approval of a higher education institution by a formal review board after the institution has complied with certain requirements.

Accreditation is significant because it establishes a set of high standards for all educational institutions and programs opens up access to state funding, upholds confidence of the private sector, and facilitates the transfer of credits. Additionally, accreditation aims to ensure the integrity of educational institutions and degree programs, enhancing public confidence. When a school or degree program has received the appropriate accreditation, you can evaluate its general quality without having to do a thorough analysis on your own.

Higher education accreditation is a type of quality control procedure wherein the operations and programs of higher education institutions are assessed to see if the necessary standards are met. The agency awards accredited status if requirements are satisfied. Through self-evaluation and peer review, accreditation is a process for evaluating and improving the educational quality of higher education institutions and programs. This results in the awarding of accredited status by an accrediting agency and offers recognition to the public as well as details on the caliber of education.

Accreditation is an important feature of quality assurance and so can improve the quality of the institution. It aids in figuring out whether a facility meets or exceeds the minimum requirements for quality. It aids institutions in determining acceptability and credit transfer, and it aids students in choosing appropriate institutions for enrollment. Through a number of different means, including financial standards, assessment standards, facilities and infrastructure standards,

graduate competency standards, and content standards, accreditation can raise the caliber of educational institutions.

There are four steps that in the accreditation process in a university or college. This is done either by regional accreditation organizations, national accreditation agencies and professional accrediting agencies. The first step involves peer review. Administrative and faculty peers conduct a thorough review of the prepared materials, the written report and the overall operations of the institution seeking accreditation status after the formal paper work has been submitted to the accrediting agency. Most accreditation bodies send a team of experts to visit the institution seeking accreditation status after the peer review is finished. This team frequently consists of peers and community members who volunteer their time to make sure that high standards for education are being met. The accreditation organization then asks their commission to review the data gathered and either confirm or deny the institution's accreditation status after the first two steps have been finished. Lastly, by accepting the accreditation status from the recognized accreditation, a university agrees to uphold the quality standards set by the accreditation organization and the institution also agrees to periodically submit to an accreditation renewal review.

Theoretical Framework

This part of the study discusses theories and models that enable the explanation of the concepts in internal quality assurance strategies and students' academic performance in the University of Yaounde 1. The specific viewpoint that a given researcher employs to investigate, interpret or explain actions or behaviour of the subjects or events under study makes up the theoretical framework (Imenda,2014). In general, the theoretical framework can establish links between the research problems, specific research questions, data collection and analysis methods, and how the results will be interpreted (Merriam 2009). The dissertation's entire theoretical framework serves as its guide. It provides the framework to define how the study will be approached philosophically, epistemologically, methodologically, and analytically as a whole (Grant and Asanloo, 2014). It also serves as the foundation upon which to build and support the study.

The theoretical framework consist of the selected theory or theories that undergirds the researcher's thinking with regards to how the researcher understands and plan to carry out the study as well as the concepts from the theory that are relevant to the topic (Lovitts, 2005). It

empirically defines the criteria for the application and developing theory to the dissertation that must be appropriate, logically interpreted, well understood and aligned with the question at hand (Grant and Asanloo, 2014). Theoretical framework describes the relevant theories to be used in the study.

Theories give clear instructions on how the researcher has progressed from pre- theoretical thinking and intuition to a firm foundation for comprehending and conceptualizing the subject within the context of the study. According to Grants and Asanloo (2014), a theoretical framework enables the researcher to specify the design and evaluation of the issue in a way that will allow the theory to be quantified, tested, and expanded to serve as a guide for the design of a study. A strong theoretical framework will give the reader everything they need to comprehend how the researcher put the study together. According to Amin (2005), a theory is a generalization or set of generalization that a researcher uses to systematically attempt to explain, describe, understand or even predict a particular phenomenon. By serving as the starting point for the investigation of a research problem, a theory contributes to the creation of a framework. Research is the process of gathering the data required for the theory because its initial impetus is the search for generalization, which is theory itself. This research is based on four theories. These include Total Quality Management (TQM), the Quality Assurance System of Teaching and Learning (QAS-TL), Human Capital Theory (HCT), the Classical Test Theory (CTT), Item Response Theory (IRT), the Generalizability theory (GT or G theory).

Total Quality Management (TQM)

Customer satisfaction and employee engagement are the main focuses of the process =centric management approach and model known as Total Quality Management (TQM). It is a methodical strategy for managing an entire organization. Through ongoing improvement in internal practice, the process seeks to raise the caliber of an organization's outputs, including its products and services. The TQM approach's standards can reflect both internal priorities and any active industry. The foundation of TQM is the idea that processes, not people, are to blame for quality errors and that regular process reviews will lead to better customer experiences. The works of W. Edward Deming's 14 principles for quality assurance and Philip Crosby's 14 points for quality will help you better understand TQM.

Some of the most effective and innovative methods for raising quality and productivity were developed by W. Edwards Demning, one of the founders of Total Quality Management (TQM). In the public and private sectors, sustained profitability and long-term success are currently synonymous with Demning's theories. Furthermore, his uncompromising stance on the key issue of accountability serves as a cornerstone for organizational viability. Demning contends that higher education will face enormous challenges in the future, so it is imperative that those working in the field are adequately prepared to meet those challenges. Studying the 14 Deming points and comprehending how they relate to the collegiate setting is one of the most important things these professionals can do to better equip themselves to survive the upcoming social, political, and economic turbulence. If carefully implemented, Deming's 14 points can be used to increase quality, accountability, and customer satisfaction.

The first of Deming 14 points is ‘create constancy of purpose’. Demning contends that everyone involved in delivering programs and services to students must comprehend and accept the critical significance of consistently delivering exceptional customer services. If receiving a college education truly benefits the recipient in a significant way, then those advantages ought to be evident and appealing. Students should enroll in college because it offers opportunities for personal, social, and professional success. However, this potential can only be fully realized if higher education as a whole has a common vision and is working together. In other words, the institutional mission, resource allocation, method of prioritization, and method of setting goals and objectives must all be fully agreed upon by all parties involved in the educational process. The second point is ‘adopt a new philosophy’. By this Demning argues that the goal of higher education should adapt to changing circumstance and the passage of time in this direction. In the majority of institutions, enrollment was the lone factor in decision-making. College was really the only way for students to gain the knowledge and skills deemed necessary for success. Only when it was necessary and/or unavoidable were students taken seriously. But times have changed recently. Colleges and universities are, in a very real sense, much more dependent on students than students are on them. Customer satisfaction is no longer a purely philosophical idea; rather, it may be the most crucial factor in almost all decisions. Higher education's capacity to effect this fundamental change is essential to its continued existence.

The third which is titled ‘cease dependence on inspection’ makes the case that universities should adopt a pro-active strategy when it comes to the delivery of services and programs. Professionals in higher education have a well-deserved reputation for reacting to student-related issues primarily in a reactive manner. Higher education professionals need to take on a more dynamic role than simply reacting to changing realities. They need to predict what those realities will be in the future and then create programs and services that are tailored to the challenges they will present. The fourth one which is ‘ minimize total cost’ states that while money is necessary for the creation and upkeep of high-quality educational system, assuming that quality is directly correlated with the amount of money spent can be considered as being naive. Instead of wasting excessive time and resources on relatively unimportant issues, higher education professionals need to focus more on the long-term viability of their programs.

The fifth point is ‘improve constantly and forever’. He makes the case in this passage that all institutions should prioritize continual improvement. The only way to continue to be responsive to the demands of a diverse and dynamic student body is to constantly work to deliver better services without corresponding cost increases. Therefore, those who work in higher education must maintain contact with the students they assist. They must continuously assess the needs of the students and provide services and programs to meet those needs both now and in the future. The sixth point relates to instruction. It makes the case that training is essential for the effective application of TQM in the academic setting. So, it emphasizes on the continuous on the job training of lecturers for effective output.

The seventh point concerns the institution of supervision. It is crucial that upper tier administrators consistently reaffirm their commitment to improve quality through every aspect of their management style once faculty and staff have received training in the fundamentals of TQM. Controlling what needs to be done from a central location is very different from supervising empowered employees. When it comes to TQM, personnel supervision is very different from task facilitation supervision in more traditional settings. The next one is "drive out fear," which contends that no one can concentrate on performing as well as they possibly can if they are constantly worried about the repercussions of perceived failure, such as being chastised or fired. So every effort should be made to drive out fear. Good supervisors must learn to rely minimally

on formalized evaluation schemes as a means of motivating staff and thus ensuring that departmental goals and objectives are appropriately met.

The ninth point is ‘break down barriers between departments. TQM calls for a coordinated system-wide effort from all departments to put the needs of students and improvement ahead of what separates them. Therefore, regardless of how the departmental lines appear on an organizational chart, getting the job done effectively and humanely is what matters. The next step in implementing effective TQM is the removal of unrealistic goals, such as declaring that achieving 100% student satisfaction is our goal or blaming faculty members when some of their students don't think they're doing a good job, which is unfair and unrealistic. This makes the case that efforts should be recognized in addition to results, not the other way round. Higher education professionals are not, as they might believe, inspiring their staff members to be "all they can be" if they set goals and objectives that are inherently unachievable. Furthermore, setting unattainable recruitment or development goals will only lower morale and unnecessarily impede performance. Long-term, this causes extreme frustration and hastens bum-out.

In the eleventh point, Deming talks on the elimination of numerical quotas. This simply means that an academic program must be evaluated on more than just the number of students enrolled, and that it is inherently counterproductive to hold people of various abilities to the same performance standards. Therefore, faculty members should receive compensation for achieving their own personal standards of excellence. For any effective TQM, the twelfth point urges the elimination of management by objectives. It asserts that management by objectives appears to be a sensible strategy on the surface. However, in the TQM era and with its emphasis on continuous improvement, management by objectives is self-defeating in that it severely restricts creativity by discouraging employees from going beyond the relatively small parameters they set. It can be very helpful in setting priorities and clarifying the various job functions that must be performed. Professionals working in higher education must be very adaptable in order to meet the unique needs of each student. By definition, MBOs restrict this flexibility and frequently lead to meaningless, repetitive conformity.

The thirteenth point calls for the institution of a vigorous program of re-education in achieving the goals and objectives of TQM. The culture of higher education will need to be significantly reoriented in order to implement TQM. This is not a difficult task at all. TQM calls for a steadfast

commitment to the core idea of total and ongoing customer satisfaction, which can only be attained by giving all organizational members more power. Such dedication implies an important shift in how many higher education professionals view their position as advocates for students' learning and development. The last point posits that transformation is everyone's job. It means that institution Deming's philosophy is not just the responsibility of the upper administration at the university. Everyone must be held accountable for it. Getting the decision-making process as close to the customer (the student) as possible is a key TQM tenet. This calls for a thorough understanding of TQM's broad goals and objectives, as well as how those goals and objectives translate into practical action, by everyone working at the institution. It is essential that everyone works toward the same goal in order to make this connection. It will be a disappointing failure if TQM is only the hope of one or two people who have read a little about it and have decided to "give TQM a try." TQM requires the full support of everyone within the organization.

Philip Crosby is the person credited with the starting of the TQM movement. According to Crosby's four absolutes of quality management (Crosby, 1992), he argued that spending money on quality is money well spent. The following are some of the four absolutes: Conformity to requirements is the basis on which people define quality. The best way to guarantee quality is through prevention; the performance standards for quality allow for zero defects. Finally, rather than using indexes, quality is determined by the cost of nonconformity.

Total Quality Management (TQM) assumes that people always want to do their best and it is the management's job to provide the conducive environment through continuous improvement of the system. TQM is an art of organizing the whole to achieve excellence and helps for survival of business. According to Froq et al (2007), it is not only a philosophy, but also a set of rules and regulations for ongoing improvements to the services and/or goods provided to customers. To enhance every process and meet every client need, human resources and quality techniques are used. It combines fundamental methods, ongoing initiatives and practical tools that are run according to the disciplined management style. To enable the establishment of long-term goals, the organization should focus on quality and leverage member collaboration. By introducing technological changes, TQM has a significant impact on the values, culture, and mid-sets within an organization.

Crossby's TQM advanced fourteen steps to continuous quality improvement. These include getting management's full support, setting up a team for quality improvement, developing metrics for each activity, figuring out the cost of quality, and demonstrating how improvements will lead to gains. the establishment of zero defect committees; ensuring that supervisors and employees are aware of the steps to quality; appropriately training supervisors; encouraging staff to fix errors and maintain issue logs; Holding a zero defect day will show your company's commitment to this goal; establishing objectives; identifying the underlying causes of errors and eliminating them from the process; the establishment of quality councils, the development of employee incentive programs, the holding of regular meetings, and finally, the repetition of everything from step one.

When it comes to defining quality education, educational stakeholders look to norms and expectations in the field of education, as stated in Crosby's theory of TQM and his four absolutes. According to Richardson (1999), norms and ground rules in higher education both support and discourage behaviors that aid students in achieving their educational goals and objectives. By matching educational programs with the organizational personality of the organization (higher education institutions), Faroq et al. (2007) claim that zero defect aims to ensure that all stakeholders in higher education carry out their duties correctly. Zero defects, according to Alghamdi (2016), are a commitment to success and the elimination of failure. Errors can be eliminated in this way based on institutions' willingness, and the goal of achieving zero defects tends to increase profits by cutting costs. Because of their financial limitations, higher education institutions must protect themselves from widespread criticism from the public by offering high-quality instruction (Levin, 1998).

Relevance of this Theory to the Current Research

TQM is relevant in higher education in many dimensions. It will support higher education institutions in keeping up with standards, eliminating inefficiencies, and remaining competitive. Additionally, it aids the institution in concentrating on market demands, achieving high performance across the board, and meeting the demands of all parties involved in education. It addresses the issues of increasing costs and the demand for high-quality instruction in higher education institutions. As a result, in order for the University of Yaounde 1 to be competitive, all inefficiencies must be eliminated by adhering to the 14 Deming points and the Crosby zero defect principle.

The TQM concept applied to higher education embraces all fields of education and has an effect on everything in an educational institution. Physical facilities like buildings, sports facilities, and open spaces are affected, as well as academic infrastructure like libraries, labs, documentation, and information infrastructure, curriculum, testing, and evaluation systems. Additionally, it offers plans for institutional development, academic and administrative staff, and their systems for improving. This means that the TQM handles all aspects that can enhance quality education in the university and covers all the areas used in the current study. Therefore, internal quality assurance strategies can conveniently be drawn from the TQM guiding principles in an attempt to attain quality and achieve internal and international standards.

The TQM demands that the management of the university or higher educational institutions should establish total quality as a way of life. The theory of TQM suggests that quality must be managed at every level and area of the organization with the participation of all parties, including the employees, clients, and suppliers. This is essential because TQM is driven by a clear vision for the future and blueprint for action. Adopting total quality as a way of life for the University of Yaounde 1 would surely improve on the quality of education in that institution. This is indeed an aspect of internal quality assurance. The TQM focuses on the client, both internal and external and the client in this case are the students and employers respectively. By this, the University of Yaounde 1 must define client expectations and work towards meeting them all the time. TQM also requires that higher education leadership should ensure human resource excellence in training, communication, cooperation, feedback and reward sharing. They require continuous measurement of client satisfaction.

Simply put, producing goods of the highest quality is the best way to compete and succeed in today’s global market place. The environment, human capabilities, and processes must all be continually improved if the highest quality services and goods are to be produced. Implementing TQM is the most effective way to maintain the ability of these components (Kistiani and Permana, 2019). Enhancing production's quality, effectiveness, and efficiency is the goal of TQM implementation. The competitive position will improve with continuous improvement and quality improvement, and of course the output will go up as well.

Shortcomings of Total Quality Management (TQM)

Total Quality Management (TQM) was designed essentially for industry where it has proven to be effective across time. While there are many aspects of TQM that are in line with higher education, a comparison of the two reveals that there are some aspects of TQM that need more clarification before being fully integrated into higher education. Due to its inability to deal with the rapidly changing and radical environment of today's universities, it has not been very effective in higher education. When implementing TQM in education, it is important to keep in mind that human education processes and manufacturing processes are qualitatively different (Kistiani and Permana, 2019).

TQM is not clear about the specific status of the students and presents three roles of students to include raw materials, internal or external customer and employee. Cruickshank (2003) asserts that higher education's customers and products are not as clearly defined as those in other sectors of the economy. Students have the option to participate in, pay for, and use education. When comparing business and education, some researchers see students as the customers, while others see them as the raw materials who go through the teaching process and become the finished product in the form of graduates. Therefore, it is unclear whether a student should be viewed as raw material or as a customer. TQM emphasizes the quality of incoming resources once more in order to produce quality products. The most crucial raw materials are the students' prior abilities. The abilities of the new students would typically be on a spectrum, reflecting their diverse interests and abilities. However, educational institutions before higher education focus on the development of each student's potential rather than on preparing a common module. Universities can diagnose and identify each student's talents and potential using entry tests, but they must still build on the existing and, of course, varied abilities of the students (Cruickshank, 2003). Students cannot be handled, measured, counted, or computed like other objects. Thirdly, the primary aim of higher education is learning and learning requires contributions on the part of the learners too. For instance, a student must attend classes; do assignments and others to graduate unlike a customer.

Another limitation of TQM is observed while applying the zero defect theory and educational objectives of Crosby. According to the theory, the product and service can't contain any errors. Errors and mistakes are primarily brought on by a lack of knowledge or inattentive behavior, and they can be avoided by receiving the proper training, education, paying close attention to the

details, and having a commitment to excellence. As a result, the entire process needs to be watched to make sure there are no mistakes. Mastery objectives are the minimum standards that all students should meet. They are detailed, have a limited range, and must be fulfilled by the students in order for them to advance to the next instructional level. On the other hand, developmental goals are more intricate and come with a sample of particular learning outcomes. On the continuum of developmental objectives, students are expected to perform at varying levels (Ball State University, 1999). The zero defect theory works well with mastery objectives that are minimally required, focused, and specific, but it is inapplicable to developmental objectives, which are more complex learning outcomes with a range of expected student growth.

The Quality Assurance System of Teaching and Learning (QAS-TL)

The Quality Assurance System of Teaching and Learning (QAS-TL) was designed in 2008 by a team made up of Isabel Huet, José Alberto Rafael, Nilza Costa and José Manuel Oliveira, all of the University of Aveira, Portugal. They gathered data, which the Laboratory for the Evaluation of Educational Quality analyzed at the University of Aveira's office of information management system. Their goal was to contribute to the discussion of the Quality Assurance System (QAS) results by offering guidelines and recommendations for further model enhancements. Diagnosis, improvement, quality assurance, and supervision are the four stages of the QAS-TL. There should be constant communication between all parties involved in the teaching and learning process. These stakeholders include students, teachers, course coordinators and student delegates of each program.

The first phase known as diagnosis begins with evaluation of curricular units (CUs) and takes place within a period of three weeks. The findings take into account data gathered over three moments to create a more thorough diagnosis. First, at the conclusion of each semester, all students respond to an online survey. Second, student representatives and program coordinators get together to talk about the challenging circumstances and pinpoint effective methods for each program. The group is then required to write a report that adheres to a predefined structure if they identify any problematic situations. Finally, other statistical information available through the students' individual and institutional platform is taken into consideration, mainly performance indicators.

The second phase is improvement and stipulates that all teachers involved in each curriculum unit are asked to elaborate an online report, in which the teaching and learning foundation strategy for their practice is described. Teachers can write a self-evaluation report for their teaching practice if they so choose. The entire improvement phase lasts four weeks or so. Then, in order to produce a comprehensive analysis of the situation, the coordinating teachers of the various CUs are asked to develop a summary report based on the diagnosis phase and the individual teacher reports. The coordinating teacher of the CU is asked to create an improvement plan for the situations that were identified as problematic ones. This plan needs to include corrective actions and to identify the necessary resources to put the plan in practice. Finally, this plan has to be analysed by the program commission that writes another report in which adjustments to the final version of the improvement plan may be suggested.

The third phase of QAS –TL is quality assurance which involves the analysis of all curriculum units reports in a given department by a nominated analysis commission, which includes teachers and students. Based on an analysis of the reports created by the coordinating teachers of the CUs, the commission must produce a global report that must include an executive summary describing each CU of the department. Three weeks make up this phase. The improvement plan pertaining to the problematic circumstances, examples of effective teaching techniques, and the resources and modifications required to carry out the improvement plan should all be combined in the same document. Then, this is submitted for endorsement.

Finally, the last phase is supervision and is carried out by the pedagogical commission whose members should act as mediators in the process. This commission also analyses and disseminate the results. The process is transversal to the other three phases.

Relevance of this Theory to the Current Research

The theory is relevant to the current study in that quality assurance systems that do not embed the objectives of teaching and learning enhancement can easily become obsolete, since they will produce empty judgements and values that will serve no other purpose than accountability. This system highlights the essential elements of the primary activity of higher education by putting a strong emphasis on teaching and learning. In order to develop an understanding of the existing

educational system from both a bottom-up and a top-down perspective, effective monitoring and evaluation systems are therefore crucial.

It is also relevant in its four phases all the various important strategies of effective teaching is considered. Diagnosis open the way for lecturers to understand the problems and needs of the learners and strategize on the key teaching methods to be adopted to enhance their understanding. Once that is established, every effort is made to ensure that problematic areas are dealt with appropriately. Thirdly, all the steps are examined to ensure that quality is respected in all areas. QAS-TL emphasizes on the supervision of pedagogical practices to ensure effectiveness.

Human Capital Theory (HCT)

In the early 1960, pioneering human capital researchers, including Theodore Schultz, Gary Becker and Jacob Mincer had come to share at least in broad outlines, a conception of the research agenda that arose from the adoption of human capital idea. Microeconomics development theory can be used to trace the history of the human capital theory. Land, labor, physical capital, and management were the four primary factors of production in the 1950s (Becker, 1993). However, by the 1960s, economists were finding it very challenging to explain the expansion of the US economy using the aforementioned factors. The prevailing view that the expansion of physical capital is essential to economic success was contested by the empirical work of Becker (1964), Schultz (1961), and Mincer (1974). The fundamental tenet of the HC theory is that human learning capacity has a value that is comparable to other resources used in the production of goods and services.

Most research work in the field of education adopts the HCT of Becker (1974) as a theoretical foundation. This is significant because, according to the HCT, education can increase economic growth, technological advancement, and productivity by transferring valuable knowledge and skills that can be used to earn money throughout one's lifetime (Ladipo et al., 2013). Indeed, investing in people is a form of human capital that drives social change; as a result, the output of this investment must be of high quality. Human hands-on ability can be improved through education, training, experience, and access to health care, just like other forms of human capital. Human capital is an outcome of learning that is still embodied in the individual and manifests as an increase in productivity.

There is a compelling case to be made within the human capital perspective for conceptualizing quality as transformation, which concentrates on crucial elements of higher education, such as educational processes and the improvement of student learning experiences (Kahsay, 2012). Although there is no well-established production-theory that specifies how to convert available inputs into desired end, it is argued that student learning is in some way a necessary condition for all possible purposes or core operations of higher education (Westerheijden et al., 2007). The goal of equipping students with specific skills, knowledge and attitudes that enable them to live and work in the knowledge society is one that is more successfully attained by higher education institutions the better they appear to be (Campbell and Rozsynyai, 2002). In a world that is changing so quickly, Horsburgh (1999) also proposed that the focus of quality should be on the characteristics of graduates, where the learner's transformation is crucial. In this regard, Srikanthan and Dalrymple (2003) argue that the view of quality as participant transformation is the only one that can effectively allay the worries of all stakeholder groups.

According to the human capital theory, investing in people has a significant economic benefits for both individuals and society as a whole. The fundamental tenet of the theory, according to Blaug, is that people invest in themselves for future gains-both financial and non-financial-rather than for the sole purpose of partaking in current pleasures. A productive, inventive, and educated population is essential for achieving both rapid and inclusive growth. This indicates that the development of human capital, including formal and informal education, on-the-job training, and learning by doing, all contribute to the improvement of people's economic capabilities. Shultz outlined five key investment categories that would boost human potential. First, there are health facilities and services, such as strength, vigor, and vitality; on-the-job training, such as traditional apprenticeship; formally organized education at the three secondary and higher education levels; study programs for adults (extension programs including agriculture); and migration of people and families to adjust to shifting employment opportunities. Additionally, people invest time in looking for work or spending money to learn about available positions.

Relevance of this Theory to the Current Research

In the study this theory serves as a bridge between internal quality assurance strategies (independent variable) and students' academic performance (dependent variable). Through this connection between the two variables, the importance of investment in human capital (education)

is highlighted with predicted benefits seen in high performance of students and eventual employment, job creation and better living standards. This would eventually positively impact society and the world at large.

According to the human capital theory, education boosts workers' productivity and efficiency by raising their level of cognitive stock- a measure of economically productive capability which is a result of their innate abilities and investments in them. As a result, the HCT proposes that human beings can boost their capacity for production by receiving more education and skill development. The theory has its detractors who claim that it is flawed, oversimplified, and confuses labor with capital.

Limitations of the theory

A limitation of Human Capital Theory (HCT) is that it assumes that education increases productivity in the workplace, resulting in higher individual wage but it provides little insight into the processes through which education and training are translated into higher wages. According to statistical models, education and training account for about 30% of the variance in individual wages, indicating that HCT fails to fully explain a sizeable portion of wage variability. Other theories make an effort to explain the remaining 70% of individual wage variability in the context of the earnings relationship between academic credentials like a bachelor's degree. They concentrate on the social and cultural contexts in which employment decisions are made and contend that the association between education and higher wages is influenced by a variety of variables other than productivity, including cultural and social capital. Therefore, it is crucial for policymakers to take into account alternative frameworks in addition to HCT to better comprehend the connection between education and private economic returns like higher wages.

Another drawback of the HCT is that it treats education as a relatively homogenous input in higher level applications such as those at the national or state levels. These applications make the assumption that increased productivity and wages will result from higher levels of educational attainment and quality. A problem with this approach to education is that different people and groups go through different stages of developing their human capital. People learn in different ways, so an education that works well in one setting might not in another. Due to the distinctive characteristics of their student populations, urban schools, for example, have different investment

requirements than suburban districts. It is thus incumbent upon policy makers to consider the context dependency of human capital investment to ensure allocation of resources and effective policy interventions at the national and state levels.

The Classical Test Theory (CTT)

The classical test theory is a body of related psychometric theory that forecast the results of psychological testing, including the difficulty of the items or test –takers' incapacity. A true score (also known as an error-free score) and an error score are added to determine a person's observed or obtained test score. In general, the CTT's goal is to comprehend and enhance the validity of psychological tests.

Classical test theory is based upon the true score model introduced by Spearmen. It is hypothesized that an observed score is composed of a true score and an error score. A true score and an error score are thought to make up an observed score. While an error score is the result of random fluctuations, a true score represents the test-taker's actual ability. The term "classical" contrasts these models with more contemporary psychometric theories, which are generally referred to as "item response theory," as well as the chronology of these models.

The CTT as we know today was codified by Novick (1966) and described in classic textbooks such as Lord and Novick (1968) and Allen and Yen (2002). The theory was developed after the following ideas were conceptualized: first, the knowledge that errors in measurements exist; second, the idea that the error is a random variable; and third, the idea of correlation and how to measure it. Charles Spearmen made an effort in 1904 to determine how to obtain the reliability index required for the correction as well as how to adjust a correlation coefficient for attenuation caused by measurement error.

The CTT assumes that each person has a true score, T, which would be obtained if there were no errors in measurement. The expected percentage of correct answers over an infinite number of separate test administrations is known as a person's true score. A true score reflects the test taker's actual knowledge. Unfortunately, test participants only ever see an individual's observed score, X, never their true score. The observable test score is assumed to be the true test score plus a small amount of error. A test's observed error score is the portion that results from factors other than the examinee's knowledge or abilities (Traud, 1997).

According to the CTT, reliability cannot be estimated directly since that would require one to know the true scores. However, there are numerous ways to get reliability estimates. Building parallel tests with the fundamental property that it produces the same true score and observed score variance as the original test for each individual is one method of estimating reliability.

As was already mentioned, the goal of the CTT is to come up with an appropriate definition of reliability. Reliability is meant to provide insight into the overall caliber of the test results under consideration. The general consensus is that an instrument appears to be better the higher its reliability. The CTT doesn't specify the reliability level that must be high in order to be significant, but for alpha Crombach, a high value of over 0.9 denotes item redundancy. For personal research, a score of about 0.8 is advised, and one of 0.9 or higher is preferred for high stakes testing. Reliability offers a simple, one-number index of test quality. It does not, however, offer any data for assessing a single item. The P value (proportion) and the item-total correlation (point-biseral correlation) are two statistics that are frequently used in item analysis with the CTT approach. The P value, which is often referred to as item difficulty, is the percentage of test takers who responded in the keyed direction. Item discrimination is the term used to describe the item-total correlation, which provides an index of the discriminative or differentiating power of an item. Additionally, these statistics which are used to assess items and identify potential problems like a perplexing distracter which are computed for each response of the frequently used multiple-choice item.

Relevance of this Theory to the Current Research

CTT contributes significantly to assessment practices. Because it is used to give useful feedback on a person's and the students' understanding of curricula and acceptance of particular teaching methods, assessment is a crucial component of education. Testing is one of the most straightforward ways to get this kind of feedback. A lot of factors must be taken into consideration when designing a test, including matching the test items to the subject matter as evenly as possible with the help of a table of specifications, paying close attention to the test's final details, such as its instructions and duration, to avoid casting doubt on the test's validity and reliability (Wong and Kanageswari, 2020). In order to ascertain whether the items used are of high quality, they must be analyzed in terms of their difficulty and how well they are able to distinguish or discriminate between the students. A good test will be able to provide quality feedback on intended construct.

This theory is relevant to this study in that it describes the best way to understanding and improving reliability of psychological tests. It should be understood that assessment gives feedback on how effective the teaching and learning process was carried out. Therefore, key components of assessment should be taken into considerations to draw conclusions that can be void of errors. The theory of testing is based on the idea that a person's observed or obtained score on a test is the sum total of a true score (error – free score) and an error score. The classical Test Theory is thus relevant to this study in that it seeks to find out whether there are errors in the measurements just like this study which also seeks to find out whether there are errors in examinations organized in the University of Yaounde 1 and to find out whether these errors affect students' academic performance at the university. Classical Test Theory is used to arrive at a suitable definition of reliability as well as improve on the reliability of a test. This is useful for this study because reliability is an important psychometric property of any examinations like those written at all levels in the university.

Therefore, this researcher is interested in the reliability of examinations organized by the University of Yaounde 1 and its relationship with the performance of students at the said examinations. The CTT also highlights the fact that most test users do not observe a person's true score because of its focus on the observed score. Therefore, every score is composed of two components which include the true score (the score that would be obtained if there are no errors) and the observed score (the true score plus some error).It would be interesting to find out whether the teachers of the university of Yaounde 1 take steps to reduce these errors in measurement in a way that they cannot affect students' performance in any way in their test and end of semester examination.

Limitations of the Classical Test Theory

The Classical Test Theory has shortcomings. For instance, with CTT, it is impossible to distinguish between examinee and test characteristics. Only when both are considered together can either be understood. Another flaw in the definition of reliability is that it refers to the correlation between test results on different test formats. The issue with this is that different people's definitions of parallel tests vary. Numerous reliability coefficients offer reliability estimates with unknown biases or lower bound estimates of reliability. The standard error of measurement is the third flaw in the CTT. The issue here is that the CTT makes the assumption that the standard error of

measurement is the same for all test subjects. However, as Humleton et al., (1991) explains in his book, scores on any tests are unequally precise measures for examinees of different abilities, thus making the assumption of equal errors of measurement for all examinees implausible. The CTT's focus on tests rather than individual items is its next drawback. In other words, it can't be used to predict how a particular test taker or even a group of test takers will perform.

The nature of the CTT is problematic in meeting research goals because it assumes a linear relationship between the latent variable and observed scores. By assuming linear relationships, CTT treats a discrete and constrained scale as if it were continuously extending from minute infinity to plus infinity by assuming linear relationships. However, categorical data visualization exhibits a very different behavior, such as accumulation at specific values, gaps between values, or more than one peak. The continuous assumption may only be a rough approximation for these scales. Another implication is that the sample dependence of parameters makes it hard to generalize results to a population, particularly if no probabilistic sampling was used. Constant replication and revalidation of results derived from such measures are needed to gauge validity.

Item Response Theory (IRT)

Another relevant theory under consideration for this research is the Item Response Theory (IRT). In the 1950s and 1960s, IRT as a theory underwent its formative years. The Educational Testing Service psychometrician Frederic M. Lord, the Danish mathematician Georg Rasch, and the Austrian sociologist Paul Lazarsfeld fxaz were three of the pioneers who independently conducted parallel research. David Andrich and Benjamin Drake Wright are two important individuals who helped the IRT advance. When practitioners realized the benefits and usefulness of the IRT, it was widely used in the late 1970s and early 1980s.

In Psychometrics, item response theory, also known as latent trait theory, strong score theory or modern mental test theory is a paradigm for the design, analysis and scoring of tests, questionnaires and similar instruments measuring abilities, attitudes or other variables. It is a testing theory based on the relationship between test takers' levels of performance on an overall measure of the ability that the test item was intended to measure and their performance on a test item. Both the characteristics of the test items and the test takers are represented using a variety of statistical models. Contrary to more simple methods for creating scales and analyzing survey results, it does

assume that each item is equally challenging. This sets IRT apart from, say, the assumption in likert scaling that all items are assumed to be parallel instruments or, in other words, that all items are assumed to be replications of each other. IRT, on the other hand, views each item's difficulty as information to be taken into account when scaling items.

The IRT focuses on the item as opposed to test –level focus of the CTT. As a result, the IRT simulates how each test taker with a particular ability will respond to each item. The term "item" is a general one that refers to a variety of educational materials. They could be multiple-choice questions with right and wrong answers, but they're usually statements on questionnaires that let respondents indicate their level of agreement (on a scale or a likert scale), whether a patient's symptoms are scored as present or absent, or whether complex systems require diagnostic information.

The theory is based on the notion that person and item parameters mathematically combine to determine the likelihood of a correct/keyed response to an item. The person parameter is typically thought of as one latent dimension trait, for instance, a person's general intelligence or attitude. Items are characterized by a number of parameters, such as their difficulty, discrimination, and the pseudo-guessing parameter, which describes the lower score that even the least talented people will receive as a result of guessing.

The IRT offers a framework for assessing the effectiveness of assessment processes as well as the effectiveness of the specific assessment items. IRT is most frequently used in the field of education, where psychometricians use it to create and design tests, manage test item banks, and compare the difficulty of test items across different test versions. IRT models are frequently referred to as latent trait models, as was already mentioned. Latent refers to something that cannot be directly observed but must be inferred from manifest responses, and is used to emphasize that discrete item responses are taken to be observable manifestations of hypothesized traits, constructs, or attributes.

The IRT is typically thought of as being superior to the CTT. This is because IRT typically offers more flexibility and information for tasks that can be completed using CTT. Some applications, like computerized adaptive testing, are made possible by the IRT and are difficult to carry out with

the CTT. Another benefit of the IRT over the CTT is that a researcher can increase the validity of the assessment thanks to the IRT's more sophisticated information.

IRT entails three assumptions: a one dimensional trait indicated by local item independence; the ability to model an individual's response to an item using a mathematical item response function (IRF). In addition, it is assumed that the trait can be measured on a scale, typically one that has a mean of 0.0 and a standard deviation of 1.0. Homogeneity, a quality that needs to be defined or empirically proven in relation to a specific purpose or use, should be considered as one dimension. Local independence refers to two things: first, that the likelihood that one item will be used is unrelated to any other item(s) being used; and second, that each test-taker's response to an item is an independent decision.

Relevance of this Theory to the Current Research

Item response theory (IRT) offers a practical and theoretical sound framework for evaluating educational outcomes. It helps with tasks like building measuring tools, connecting and equating measurements, and assessing test bias and differential item functioning (Glas, 2008). From the micro level-teaching, instrumentation, and curriculum to the macro level which is school effectiveness research and sizable attainment studies-educational evaluation addresses a wide range of issues. Item Response Theory (IRT) and Classical Test Theory (CTT) appear to be two traditions in the statistical theory used for educational assessment and evaluation. IRT theory therefore guides how teachers especially those of the University of Yaounde 1 develop their items to be valid and reliable.

IRT is relevant in this study because it guides how teaching and assessment which are key components of efficient university functioning. The greatest prove that education has taken place can only be judged through a fair and valid assessment practices. The IRT therefore, takes care of effective assessment is carried.

One of the most important advancements in the field of educational and psychological measurement is item response theory (IRT). In areas like test development, item analysis, equating, item banking, and computerized adaptive testing, IRT serves as a foundation for statistical methods. These are the main topics covered in this study. Its applications encompass measuring a range of latent constructs across numerous disciplines.

Shortcomings of Item Response Theory

The main drawbacks of IRT are its complexity, the size of the samples needed to calibrate item parameters and person ability estimates, and a potential lack of robustness in the presence of exceptions to its statistical presumptions. Another limitation of IRT is that it is a complex model requiring much larger samples of people than would be needed to utilize the CTT. Whereas in CTT, the recommended minimum is 100 examinees for conducting an item analysis, in IRT, as many as 500 to 100 examinees may be needed to obtain stable results, depending on the complexity of the chosen model.

Generalizability Theory (GT)

The generalizability (G) theory is a psychometric theory that divides scores into their underlying multiple sources of variation using a statistical sampling approach. In their classic paper on internal consistency alpha, Crombach and his colleagues (Crombach, Rajaratnam, and Gleser, 1963) extended the concept of G theory. By identifying and estimating the magnitude of measurement error from various sources, it addresses the consistency or dependability of score interpretations. The reliability of scores obtained by various measurement procedures, such as tests, rating scales, surveys, and observation, is a subject of growing interest to researchers in educational assessment. Traditional reliability techniques based on classical test theory take only one source of measurement errors into consideration. By offering a flexible and useful framework for estimating the effects of multiple sources of measurement errors through the application of analysis of variance procedures, generalizability theory (GT) extends the CTT (Alkharusi, 2012). It aids researchers in educational assessment in identifying the best items, situations, and raters for achieving the highest level of score reliability.

The measurement theory called GT can be used to determine how reliable data through any procedure, including tests, rating scales, surveys and observations is. Dependability is the ability to reliably extrapolate from a student's observed performance on a test or other measure to the typical score that student would have gotten under all reasonable circumstances, such as all conceivable test forms, conceivable test occasions, or conceivable test items. The CTT concept of the true score is analogous to this average score, which is referred to as the universal score. As a result, GT regards scores as reliable if they allow for precise deductions about the range of

acceptable observations that they are intended to represent (Allal and Cardinet, 1997). In GT, any observed score is considered to be a sample from a universe of admissible observations. This universe consists of all possible observations that would be acceptable as substitutes for the observation in question.

For instance, a student's score on a particular test day is not the only reliable measure of how well they performed. A score from a test that was administered on a different day, in a different format, or perhaps with a different set of questions would also be acceptable. The levels of these testing situation are referred to as conditions, and each of these characteristics is referred to as a facet. In the literature on experimental designs, the terms facet and conditions are equivalent to factors and levels (Shavelson and Webb, 1991). The characteristics of the observations that specify the circumstances in which a passing grade is possible are used to define the universe. One source of measurement error is a universe with single facet. Items are the facet of the measurement and the item universe would be defined by all admissible items, for instance, if the decision maker wants to generalize from the score on one set of test items to a much larger set of test items.

Occasions are facets, and the universe of occasions would be defined by all admissible occasions if the decision maker wanted to extrapolate from performance on one occasion to performance on a much larger set of occasions. Only one source of error in a measurement is taken into account at a time by conventional methods of reliability that are based on CTT. For instance, test-retest reliability only takes into account the testing occasions as a source of error. Parallel forms reliability considers the forms of the test as the only source of error. Internal consistency reliability considers only the items as a source of error. As such, CTT provides very limited information.

The underlying assumptions of GT are essentially the same as those of CTT. First, the generalizabilty analysis should be performed on interval or ordinal data. Second, GT makes the assumption that a student's observed score is made up of both their universe score and one or more sources of error. Thirdly, it is assumed that the errors are uncorrelated and independent of the universe score. In other words, the measurement model's effects are all independent. Fourth, GT makes the assumption that the samples used to calculate the error variances and the chosen students' items or occasions are representative samples drawn at random from the relevant populations. These facts, however, sometimes can be regarded as unchanging. The idea of randomness, in particular holds that even though a facet's condition weren't randomly sampled,

they can still be regarded as random if conditions that weren't present during the study can be substituted for those that were. For instance, the facet might be treated reasonably as random if the researcher is willing to swap out 30 items from a test for another sample of 30 items. Fifthly, all score levels have identical standard errors. In other words, regardless of the underlying universe score, the same standard error measurement is frequently applied to all objects of measurement (Strube, 2002).

In GT, there are two different categories of error variance that corresponds to relative and absolute decisions. Absolute decisions are those regarding the absolute level of performance, whereas relative decisions are those regarding the individual differences between students (Strube, 2002). Researchers who are interested in decisions involving the rank ordering of individuals should pay particular attention to the relative error variance (2) in these cases. The interactions between the individuals and the facets created by random sampling of the measurement conditions are the only sources of error in this instance. This is due to interactions that the measurement object is a part of reflecting shifts in relative standing among facet levels.

A generalizability coefficient, an index similar to the CTT reliability is used to evaluate the dependability of a measurement procedures. It has a range of 0 to 1, with higher values indicating more accurate measurement techniques. In spite of the measurement conditions' random fluctuations, values close to 1 show that the scores of interest can be distinguished with a high degree of accuracy (Shavelson, Yin, and Willey, 2015). Both the relative error and the absolute error have generalizability coefficients.

As previously stated, the G theory offers a framework for anlysing the dependability of measurement method. The researcher can determine how many conditions of each facet are required (such as number of items, number of occasions) to achieve the best level of generalization by performing a generalizability analysis to identify the sources of measurement error (Marcoulides and Goldtein, 1990). As a result, adding more items to the measurement procedure will increase the generalizability coefficients since adding more items will result in lower estimates of both relative and absolute errors.

There are two stages in the application of the G theory. The first are studies on generalizability (G) and decision (D). The G study aims to estimate the score variance components linked to various

sources. These estimated variance components are used in a D study to compare and contrast various options for a subsequent measurement. From the G study, variance components can be estimated. They provide information similar to a single measure intra class correlation coefficient on the estimated variance associated with measurement procedures using only one interviewer and one rater. The decision-making process for future measurement procedures, as the sampling of some facets is altered, is then based on these magnitude of variance components.

To maintain the validity of measurement of psychic injury, one might be interested in changing the number of interviews but increasing the number of raters ($n' i = 1$ and $n' r = 5$ instead of $ni = 2$ and $n r = 3$). To determine whether this hypothetical procedure satisfies the reliability requirement and to determine the minimum number of interviewers and raters required to produce reliable results, reliability coefficients and variance components can be calculated. Alternately, the researcher may need to raise the levels of that facet in order to achieve a sufficient level of generalizability if the findings of a G study reveal that some sources of error in a design are substantial. In general, the D study explains what can be done differently if one is depending on a measurement to make future decisions. In the case, where changes should be made, the G study acts as the D study by employing the same sample of items used in the initial G study (Brennan, 2001). G theory has a software called G string V which is used in G theory analyses.

Relevance of this Theory to the Current Research

This theory is crucial to this study because it can be used to evaluate multiple sources of error in a particular measurement situation and offers more accurate estimates of dependability in those situations. Between relative and absolute decisions, GT makes a distinction. Decisions based on relative comparisons between people are called relative decisions. Decisions based on an individual's absolute performance level are referred to as absolute decisions.

Review of Related Literature and Empirical Literature

Here, the related literature on the topic shall be discussed following the sub themes of the independent variables and dependent variables.

Internal Quality Assurance and Students' Academic Performance

According to Asseme (2007), the Cameroon government called on the implementation of quality assurance in all public and private universities in the country in 2009. Following the decree on the organization of the Ministry of Higher Education in Cameroon, the government created the Accreditation and Quality Management with a sub division for quality assurance on October 1, 2012. Based on this, a quality assurance assessment was carried out at the University of Yaounde II in February 2014 because the institution lacked a quality culture.

According to Loutfi (2018), education has become a crucial differentiator in modern economics. In an investigation to identify the crucial elements for quality management achievement in Moroccan higher education institutions. The study goes on to claim that quality measures are heavily influenced by how engineers, business people, managers, and educators think about and put them into practice. Consequently, the competitive nature of today's world and the growth and development of the global education market make higher education's driving force its quality.. Using the Delphi method and eight different public universities in Morocco as panelists, this study found that top management commitment and responsibility, working environment, employee involvement, employee training and development, infrastructure, and the capacity for cultural and organizational transformation were all significant factors. This study is intended to show Moroccan decision –makers that there are different approaches to education and that we should not try to copy the French educational system. Each system has a very different goal and set of difficulties. The most private national matter of all is education, and Morocco should treat it as such.

Understanding the various conceptions of what quality assurance entails is essential to mastering the concepts of quality in higher education (Bertolin, 2015). In the text's initial review of quality concepts based on the taxonomy presented by the top researchers approaching this topic, a list of terms recently identified according to the views of quality in higher education, such as economic competitiveness and market growth, sustainable socio-cultural and economic development, is presented. The article also discusses the constant conceptual relativity of quality in higher education.

The mechanisms for ensuring quality in Cameroonian universities, along with a perspective look at the evolution of those institutions and recent deregulation efforts, all point to a detrimental

impact on quality assurance (Besong, 2016). This study's list of regulation mechanisms includes things like giving new programs the proper amount of scrutiny and relying on the unbiased counsel of examiners. By utilizing state law no. 98/004 of 1998 to support internal school administration's efforts and, more importantly, by establishing connections between universities and connecting university education to the field of science and technology. The essay advances quality control while also strengthening the notion of economic development and growth.

Seyfried and Pohlenz (2018), studied the variables that affected higher education's quality assurance efficacy and looked into how quality managers perceive various approaches to this field. The mixed-method study used an ordinary least squares regression model to explain the perceived effectiveness using structural variables and activities related to quality assurance carried out by quality managers. The result shows that higher perceived quality and effectiveness levels are necessary prerequisites for receiving support from higher education institutions, higher education management, and collaboration with educational institutions. The promotion of quality assurance by quality managers also shows a strong correlation to perceived effectiveness. Negative correlations are found between sanctions and the belief that quality assurance is an additional administrative burden.

According to Assiyai (2013), Nigeria, like other continue around the world, views education as the main tool for fostering national development. According to Assiyai, education is crucial for the social, economic, and political development of Nigeria. These educational goals can be fully attained if higher education in Nigeria is provided in a high-quality manner. He further argues that for Nigeria to compete on a global scale, high-quality higher education is essential. This article outlined and discussed the problems with higher education's quality, including the lack of adequate funding. The Nigerian government is then advised to spend the 26% that UNESCO has set aside for education.

In a different study, Engunsola (2016) investigated barriers to quality assurance in tertiary institutions. The researcher asserts that technical and vocational education and training (TVET) and quality assurance are two concepts that are frequently discussed in specialized skill-focused education. The achievement of TVET goals in Nigeria, particularly in tertiary institutions, has been found to be hampered by ineffective or absent QA. The study makes recommendations for improving TVET in Nigeria because it contends that poor quality assurance (QA) at all levels has

prevented TVET from having a significant impact. The study's practical implication is that policymakers must focus on important areas like finance, access, quality assurance, and program relevance to the needs of the nation in order for TVET to advance technical advancement, employability, and national development.

Doh (2015) assessed the strategic goals of higher education in Cameroon. The broad strategic objectives are determined at the system level, and one state university is responsible for translating and putting the objectives into practice, organizational alignment with the strategy, making the strategy everyone's responsibility, making the strategy continuous, and mobilizing leadership change. The underlying concepts in these principles are participation, communication, consensus, and relevance. The study used information from semi-structured interviews, policy documents, relevant literature, websites, and other sources. The research strategy was qualitative, and analysis was carried out by interpreting phenomena in their natural settings. The findings demonstrate that although the strategic objectives are generally understood, there is disagreement regarding their applicability to higher education. It was discovered that although the pertinent stakeholders are known, the respondents concur on their significance. The state has the most influence, with none of the other stakeholders having an equal amount. According to the study, Cameroonian higher education should create tools for its quality-improving strategy. According to the study, communication, consensus, clarity, and relevance are the main obstacles to managing strategic objectives in Cameroon HE. The system does have the potential for better management and eventual adoption of the applications of the balanced score board as a tool for strategic management and communication. According to the study's findings, a single higher education institution can more easily implement the balanced scoreboard than an entire higher education system. The study is important because it assesses the strategic goals of Cameroonian higher education, which should include quality assurance, but it omits to mention this as a key action plan in achieving higher education quality goals.

There are many transformational challenges that the new millennium is presenting in almost every sphere of life, including the efforts to establish world-class standards in the educational system (Chiaha and Sandra, 2015). Education reform is therefore now necessary to guarantee the efficacy and quality of education. The study thus emphasizes indicators of educational quality and suggests that university administrators and other stakeholders in education make a concerted effort to

implement quality structures with unambiguous indicators for evaluation. The study however, is limited to quality assurance indicators while the current study discusses internal quality assurance strategies and their effect on students' academic performance.

Any institution, organization, or nation's direction, including that of its educational system, must be determined by public policy (Ngwa and Mekolle, 2020). The study also makes the claim that a country's educational processes are improved, authenticated, and regulated by its public education policy. The qualities of good policy must serve as the foundation of any effective education policy. Since gaining its independence, the Cameroonian government has passed a number of educational laws that have helped to shape educational practices over time. While some academics believe that these make up Cameroon's education policy, others counter that due to their fragmented and unclear nature, they do not qualify as such. This conceptual paper examined contemporary Cameroon's public policy on education in relation to the qualities of a good policy. It strengthens the current framework for potential future research on educational policy and correlation with system effectiveness, among other factors. The paper is based on the observation that the recent and ongoing conflict in the Anglophone regions of the nation has its roots in failures in educational policy. As a result, it presents problems and provides information to inspire decision-makers in the field of education to take action. The authors draw the conclusion that Cameroon's education policy lacks significantly in terms of comprehensiveness, quality, adequacy, and access as evidenced by a close examination of the situation in other African nations. The paper thus suggests that a National Conference on Education, similar to the 1995 Education Forum, be held immediately. This study is relevant to the current discussion in that it is focused on Cameroon.

The mechanisms of external quality assurance in higher education, including accreditation are composed of three main components in Indonesia. The study presents a new paradigm for quality assurance procedures in Indonesian higher education. The purpose of the essay was to present a thorough analysis and succinct literature review of the major problems relating to quality control in Indonesian higher education. The Ministry of Research, Technology, and Higher Education has established three main standards for quality assurance: standards for education, standards for research, and standards for community service. Each standard has eight substandard, so a minimum of 24 standards must be used. These three fundamental standards act as the absolute minimum in terms of academic requirements, obliging every university to take into account and

guarantee both academic and no academic quality. An institution of higher learning must create IQAS standards that go above and beyond the National Standards for Higher Education. The more distinctive or expansive the content or substance that is in the higher education vision, the more diverse types and numbers of standards universities can create. The more standards that have been established and put into practice, the better the management system is being implemented so that the Institution can be superior. Each tertiary institution always has policies and practices intended to guarantee academic standards, even though academic institutions continue to operate within the national policy framework established by the state to guarantee academic standards. This article reviews new academic and non-academic standards created by Indonesian universities and presents a new paradigm of high education quality assurance systems in that country.

Studying higher education in Pakistan, Andleeb and Jusoh (2020) looked into the quantity of institutional internal quality assurance practices (IIQAAPs), student satisfaction, and the connection between the two. The study used a quantitative methodology, distributing online questionnaires to 136 top managers and student representatives via proportionate stratified random sampling. Multiple regression tests were used in the study to test the hypotheses, and only 112 questionnaires were received for analysis. According to the findings, IIQAAPs in higher education are perceived by top managers and students to be at a moderate level. It was found that there was a strong correlation between IIQAAPS and student satisfaction.

University Human Resources

There is a lot of research on university human resources which is also essential for this study. Human resources are very important component of any institution and its management is as important as its existence. Public universities, according to Mutahi (2015), are labor-intensive organizations that depend on people to deliver services effectively. The goal of this study was to ascertain the relationship between the effectiveness of Kenya's public universities and tactical methods for managing its human resources. The study's specific objectives were to determine the effects of resourcing practices on public university performance, reward management's influence on performance at public universities, training and development's effect on performance at public universities, and the combined effects of these three factors on public university performance in Kenya. Public universities and their constituent colleges were surveyed for the study. Findings from the research indicate that strategic human resource management techniques significantly

improve performance at Kenya's public universities. The findings also indicated that the performance of public universities was influenced by the practices of resource allocation, training and development, and reward management. The findings led to the following crucial suggestions being made: In order to address the need for training and development, management should conduct a staff competency analysis and the government should make sure that selection in public universities is based on the equal employment opportunity principle. To automate resourcing procedures, management should spend money on HR information systems.. This study is relevant though it fails to discuss the fact that human resource management should be consider as an internal quality assurance strategy.

The effective human resource management in educational institutions is relevant to effective teaching and learning. According to Chiedozie, Victor and Famuti (2018) the relationship between staff human resource management and secondary school accounting students' academic performance was examined in the study, which was published in the Internal Journal for Social Studies. Two research questions served as the study's compass, and a correlation survey research design was selected. The study found that the recruitment process, effective teacher placement in classrooms, and regular performance evaluation have a positive impact on the academic success of accounting students. The findings recommended, among other things, that school administrators make sure that teachers are constantly.

The teacher is critical in improving students' academic performance and therefore management must pay attention to their well-being. According to Hendrawijaya (2020), a number of factors affect teachers' performance. Researchers examined how organizational culture, leadership style, work commitment, and work ethics impact academic performance in both teachers and students in a study. Teachers from private high schools in Indonesia participated in the study's analytical research. The study sample consisted of 213 respondents, and a questionnaire was used. The path analysis was used to calculate the direct and indirect effects using structural equation modeling. The results show that organizational culture, leadership style, work ethic, and work commitment all significantly enhance academic performance in both teachers and students. Besides teacher's performance plays a significant mediating role in the relationship between the independent variables and students' academic performance.

University authorities can also improve on the capacities of lecturers to ensure better data management. In North-Central Nigeria, Etejere and Ogundele (2017) conducted research on the effectiveness of lecturers in state-run universities. 3070 department heads, advisers, examination officers and storekeepers from 65 state run universities in northern Nigeria participated in the study using a descriptive survey design. For the study, which used the stratified random sampling method, 1300 participants were chosen using four questionnaires and four research hypotheses. The Data Management Issues for Lecturers' Effectiveness Questionnaire (DMILEQ), a self-created survey, was used to gather the information. The instrument was validated by a testing and measurement specialist. The split-half reliability index proved the instrument's usability, including descriptive statistics. To address the research questions, they used descriptive statistics, such as mean scores and standard deviation at a 2,5 decision. Pearson The moment correlation statistic was used to test each hypothesis at the.05 level of significance. The findings demonstrated that effective data management, availability, and use have a significant positive impact on record keeping, teaching research, enrollment projection, graduation rate, student academic performance, and lecturers' efficacy in state tertiary institutions in North Nigeria. It was however recommended that the lecturers should be exposed to the training on the data management issues like data and utilization methods through workshops, conferences, in service training and method of managing available data towards enhancing lecturers' effectiveness in state tertiary institutions in Nigeria.

The management of human resources can shape the outcome of students' academic performance. For instance, Mwikaria, Gori and Chepkonga (2019) set out to establish the effects of human resource and the influence of financial resources on academic achievement of students in public secondary schools in a sub county in Kenya. To gather data for the study, the researcher used a survey research design and a sample of eight principals and twenty department heads, on whom interviews and questionnaires were administered. The survey items' reliability was tested using the Cronbach alpha index with the assistance of the supervisors, and it was found to be 0.749. Data from the questionnaire were analyzed using Pearson r and the Statistical Package for Social Science Statistics (SPSS), whereas information from the interview was verbally reported. The findings of the study demonstrated a significant relationship between academic achievement and the administration of both human and financial resources. The findings of this study led to recommendations being made to the federal government and the county government of Garissa. The study is related to the present study in that it reveals the importance of human resource

management on students' academic performance though it fails to highlight the fact that this is a quality assurance strategy.

The effective management of human resources in the educational sector plays a key role in influencing the academic performance of students. In order to ascertain this, Nyoho (2021) conducted a study to look at the impact of human resource management on students' academic performance in exams given by the West African Examination Council in public secondary schools in Port Harcourt, Nigeria. The study was conducted using a descriptive research design, and its guiding principles were two research questions and two hypotheses. There were 217 participants in this study, 122 of whom were administrators and 85 of whom were not. The sample size for the study was 207 individuals. Purposive sampling was used to determine the study's sample size. The main data collection tool in this study was a questionnaire. Mean ratings with a criterion mean of 2.50 were used to analyze the research questions, and the z-test with a significance level of 0.05 was used to test the hypotheses. The findings revealed that there was no discernible difference between male and female administrators' mean opinion ratings on the impact of hiring, selecting, and staffing on students' academic performance in the WAEC. The Rivers State secondary School Board should deploy and transfer teachers based on the need in each school, making sure that all schools in urban and rural areas have enough teachers to bring about quality teaching delivery in schools in Port Harcourt Metropolis, Rivers State.

Since students' academic performance depends on teachers, the latter's development should be a priority to any management. Bingilar and Etale (2014) set out to investigate the effect of human resources development on the productivity of academic staff in Nigerian universities in order to provide evidence of this. For the study, two universities in the state of Bayelsa were surveyed. The annual reports of Federal University, Otuoke, and Niger Delta University were used to compile the data. The relevant data were statistically analyzed using multiple regression. The results of the study show a positive and significant correlation between academic staff performance in Nigerian universities and human resource effectiveness and certification. A strong inverse relationship between academic staff performance and human resource promotion was also confirmed by empirical research. The researchers suggested that employers provide recipients with training and human resource development relevant to organizational goals and provide them with an enabling environment to perform tasks that will result in excellent staff performance. Teachers' ongoing

professional development is essential for raising university students' academic performance. In a quantitative study, Zhaohui1 and Anning (2020) investigated the opinions of Jiangsu University teachers regarding the influence of teacher professional development on students' academic performance. 298 teachers who took part in the study were surveyed to get their opinions. The data were analyzed using a structural equation model and confirmatory factor analysis. It was found that teachers' research skills and instructional methods have improved as a result of participating in professional development programs for teachers within the last three years. According to the teachers, it has also significantly improved the results for the students. However, it was discovered that some factors made it difficult for teachers to take part in the PD activities. It became apparent, among other things, that there is a lack of employer support and some sort of conflict between professional development and work schedule. Relevant. Relevant suggestions have been given to address this challenge.

Emphasizing the impact of teacher professional development on student achievement, Parish (2013), used scores on curriculum-based assessment and competency based assessment. Teachers of science and mathematics for students in third through fifth grades were study participants. For credit types related to curriculum, instruction, differentiation, assessment, technology integration, and continuous improvement, teacher development courses were gathered. 8,454 students' achievement data were used, including 2,883 third-graders, 2,752 fourth-graders, and 2,819 fifth-graders. Half of the student participants scored above the median, and the other half scored at and below the median, creating a dichotomous distribution for the dependent variable of student achievement. A number of logistic regression models were fitted to the data in order to find the most accurate model, looking at all main effects and interaction terms between all variables. The study's conclusions show that teachers' involvement in the curriculum, instruction, and differentiation credit strands increased the likelihood that 4th grade science students would obtain CBA scores higher than the district median. Students' performance in science in the fourth grade suffered the more professional development hours they accrued across various credit strands. In 5th grade science, the students whose teacher spent more hours in professional learning for continuous improvement had an increased likelihood of scoring above the district median on CBAs.

Teachers' development enhance teachers' performance (Asita and Austin, 2019). A questionnaire and a descriptive survey design were both used to collect data for the study. Using the purposive sampling technique, 400 teachers were chosen for the study from a population of 24, 793 teacher respondents. The research questions were answered using the mean and standard deviation, and the hypotheses were tested using the Pearson Product Moment Correlation coefficient. It was determined using the Crumbach Alpha (SPSS version 21.0) reliability test that the instrument was very reliable with a result of 0.85. In Rivers State's public secondary schools, teachers hardly ever receive on-the-job training or professional development, according to the executive summary of the findings. The study recommended that all interested parties make sure that teachers are properly trained, retrained, and developed in order to maximize their effectiveness.

Human capital development affects students' academic performance (Santos, 2012). The research showed a strong correlation between students' academic performance and teachers' credentials and years of teaching experience. A negative correlation between student academic performance and the teacher-to-student ratio was also discovered. The Chi-square method was used to analyze the data. The findings demonstrated a significant relationship between teachers' credentials and years of classroom experience and students' academic performance. It also realized there was a bad correlation between students' academic performance and the teacher-to-student ratio. Based on these results, it was found that factors affecting teachers' effectiveness, such as gender, age, education level, and years of teaching experience, included. The study recommended among others that stakeholders in education should not compromise in the employment of qualified and experienced teachers, and that there should be more provision of more facilities that will reduce the teacher - student ratio in schools so that academic performance can be improved.

The process for hiring and retention of teachers can have an impact on students' academic performance. In a Master's dissertation, Mokodita (2011) investigates the root causes of the University's high turnover rate and low retention of academic staff, and offers potential solutions to address the issue. The study examines the elements affecting hiring practices and staff retention. Additionally, it pinpoints the causes of the high academic staff turnover rate at the University of Limpopo, investigates the problems at their core, considers interviewee feedback, and offers suggestions that will assist the institution in creating practical and doable strategies for academic staff recruitment and retention. According to the study, the human resources division should keep

track of the academic staff's career paths and inform all new hires when training opportunities arise. This announcement could be made at the beginning of the final year before the appointees are qualified for training-based appointments. This announcement could be made at the beginning of the final year before the appointees are qualified for training-based appointments. The university must establish a tradition of fair, unambiguously stated, and strictly adhered-to deadlines for processing promotion applications.

According to Mutuku, Arasa and Kinyili (2021), there is a relationship between teaching staff recruitment and the academic performance of secondary schools. .The study is a mixed method research design and the resource -based theory, universastic theory, and human capital theory. The 413 secondary schools in the county were the target demographic. While purposive sampling was used to choose six secondary schools from the study's key informants, it used the principals as its observational units. A sample size of 201 was obtained, and the remaining schools were chosen using stratified sampling based on the type of school. Self-administered semi-structured questionnaires and interview schedules were used to gather the study's data. While descriptive analysis and inferential analysis were used to analyze the qualitative data, content analysis was used to qualitative data. To ascertain the correlation between the variables under study, both bivariate and regression analyses were performed. The study discovered that key factors influencing academic performance include the recruitment and selection of teaching staff, one of the human resource management practices under investigation.

The teacher characteristics upon recruitment could affect teacher performance and by extension students' academic performance. Jacob et al (2016) in a working paper carried out a study on the relationship among teachers' applicant characteristics, hiring outcomes and teacher performance in the some public schools in the United States of America. They contend that choosing more capable candidates for teaching positions during the hiring process could be highly cost effective way to raise educational standards, but there is scanty evidence connecting hiring process data to subsequent teacher performance. The study made use of a multi-stage application procedure that included written assessments, a personal interview, lesson plans, and the annual evaluations of all the teachers in the Washington, D.C., area based on a variety of criteria. According to the study, a number of background factors, including undergraduate GPA, as well as screening criteria, like applicant performance on a mock teaching lesson, significantly predicted the effectiveness of a

teacher. The fact that this study outlines quality strategies for hiring teachers with the goal of ensuring teacher performance makes it pertinent to the current study. The study, however, omits to address other concerns like teacher development and retention, which are also factors that support teacher effectiveness. This study is similar to the present study in several dimensions. For instance, the study discusses the importance of quality recruitment processes and staff performance which clearly links with the present study in that staff performance would directly influence student performance.

Teacher recruitment and retention are critical strategies in ensuring qualitative performance of students (Huet et al., 2020). To entice and recruit school teachers, numerous initiative and reforms have been introduced in numerous nations. Because many of these measures lack a solid evidence base, it is unclear whether they are effective. They claim that correlational research has dominated the majority of earlier studies. Through a meticulous and in-depth analysis of the available global evidence, the paper summarizes the results of some of the most compelling empirical work to date. This review includes a combined 120 research articles from 13 electronic databases, Google, Google Scholar, and other sources. For each study, the weight of the evidence is considered. The strongest supporting data shows that, although targeted funding can assist individuals in entering the teaching profession, it does not ensure their continued employment.

To entice and recruit school teachers, numerous initiatives and reforms have been introduced in several countries. However, the effectiveness of many of these measures is unclear because they lack a strong evidence base. They claim that correlational research has dominated the majority of earlier studies. Through a meticulous and in-depth analysis of the available global evidence, the paper summarizes the results of some of the most compelling empirical work to date. This review includes a combined 120 research articles from 13 electronic databases, Google, Google Scholar, and other sources. For each study, the weight of the evidence is considered. The strongest supporting data shows that, although targeted funding can assist individuals in entering the teaching profession, it does not ensure their continued employment. The study came to the conclusion that early career support and ongoing professional development could be effective methods for keeping teachers in the field.

Evaluating the recruitment program of lecturers in Tanri Abeng University, Azmy (2019), analyzed the recruitment procedures of the university using the CIPP (context, product, process

and product) model. Data was collected using observation, interviews and questionnaires. The findings showed that while the recruitment process was carried out in accordance with the university's established procedures, hiring lecturers required planning, job design, recruitment formulation, and admission standard setting. It suggested increasing the budget and facilities to ensure a successful recruitment process. Additionally, it was recommended that intensive communication be used and that student satisfaction would be attained if the hiring procedure was adhered to strictly. The study is relevant in that it duels on the recruitment process in a university, setting out strategies to be followed and eventually concluding that good recruitment practices will meet student satisfaction.

Teachers who are hardworking perform well and consequently enhance learning. The Relationship of Teacher Quality and Student Achievement in Elementary Schools is the title of a PhD dissertation by Alvarez (2008). The New York City College of Education at Tui University set out to investigate the connection between teacher effectiveness and student achievement in a community district school in New York City's public elementary schools. Data were gathered through observation, interviews, and questionnaires. The findings showed that, while the implementation of the hiring process complied with the guidelines established by the university, hiring lecturers should also take into account planning, job design, recruitment formulation, and admission standards. For a successful recruitment process, it was advised that the budget and facilities be increased. Once more, it was advised to use intensive communication and to strictly adhere to the hiring process in order to ensure student satisfaction. This study also demonstrates the statistical relationship between teachers' participation in professional development activities, support received, rewards received, and collaboration activities, and students' performance on math tests. These findings can be particularly useful in guiding policies that determine how to recruit, compensate, keep, and distribute available teachers among classrooms and schools. Additionally, they could be used as a strategic decision-making tool for putting into practice educational policies that support high-quality instruction in elementary schools by improving teacher quality.

Funding is the cornerstone for using the caliber of higher education and must be adequate to meet industrial demands. According to Onuka (2017), a simple increase in funding without an increase in "per project funding" will not produce the desired quality. He contends that in order for higher

education institutions to successfully produce results of a high caliber, funding must be used appropriately. Therefore, according to Onuka (2017), a comprehensive mechanism for funding and resource allocation in African higher education systems must be developed. Instead of relying on outside sources, African countries need to develop funding strategies for raising money within their own continent. The paper goes on to say that funding will be needed for a formidable curriculum that is inspired by both society and industry, and that the industrial revolution will be sparked by a multifaceted, inter-disciplinary, and multidisciplinary higher education research project. All-stakeholders committees on budgeting, sourcing, and using funds must be used for the collection and use of funds. Along with other things, funding supports research and teacher development. Therefore, higher education transformation is a function of funding provision and utilization process that could lead to quality outcome. This published work is important to the study in that it highlights the importance of funding in the achievement of quality education and therefore gives strategies to source for funding. However, it does not directly link this important aspect to the students' academic performance.

Quality assurance cannot be effective in education if teachers are not satisfied with their teaching job. Asif et al. (2016) argue in their discussion of the relationship between teachers' job satisfaction and students' academic performance that a wealth of research on job satisfaction demonstrates that teachers who are happy in their careers perform better. It suggests that factors like organizational justice, organizational culture, and administrators' decision-making methods are among the indicators of teachers' job satisfaction. 322 secondary school teachers from various Pakistani schools made up the study sample. They responded to questionnaires about job satisfaction and assessed the academic progress of their students using data from the 9th and 10th grade tests. The relationship between the achievement scores of students in the ninth and tenth grades and teachers' job satisfaction was investigated using the mean and standard deviation for descriptive purposes and Pearson's r. The findings showed that there was a highly significant and positive correlation between the tests. With the exception of pay and supervision, all facets of teacher job satisfaction had positive correlations with other facets. Students in the ninth grade and teachers' professional experience showed a significant correlation. It then recommended that researchers should develop a criterion for the selection and recruitment of teachers and that schools should host refresher courses in order to retain teachers. The study is relevant to this study in that it presents findings on teacher recruitment, retention and development which are internal quality assurance strategies,

though it fails to discuss other aspects of quality strategies in relation to students' academic performance.

The working conditions of lecturers have an influence on their productivity and by extension can have an impact on students' academic performance. Aliyu, Bello and Muhammed (2017) carried out a study to determine the effects of working conditions on the productivity of academic staff of selected tertiary institutions in Bauchi state, Nigeria. Both the descriptive correlational survey designs were used in the study. A sample of 400 participants were chosen by systematic random sampling out of a total of 1389 participants for the study. A questionnaire served as the data collection tool for data. Simple liner regression analysis and Pearson's liner correlation coefficient were used to analyze the data. The study's conclusions showed that working conditions have a positive, significant impact on academic staff productivity. The study comes to the conclusion that the academic staff's productivity at particular tertiary institutions in Nigeria's Bauchi state is impacted by their working conditions. The study suggests that institutions allocate enough funds to guarantee all academic staff members' safe working conditions. The study improves researchers' effort in understanding the study variables and has open up the debate on the effects on working conditions on productivity of academic staffs.

The training of teachers and their quality alongside experience contributes immensely to effective teaching and learning. In their article on teacher training, quality, and student achievement, Harris and Sass (2008) looked at the effects of various types of education and training on teachers' ability to promote student achievement. The study addressed the issues by estimating models with thorough measures of pre-service and in-service training, a rich array of time-varying covariates, and student, teacher, and school fixed effects. The results show that professional development is positively correlated with productivity for content-focused teachers and, secondly, that more experienced teachers seem to be more effective teachers.

In higher education, the lecturers' proficiency and their professional competencies affect students' academic performance. In their article entitled Lecturers' Professional Competency and Students' Academic Performance in Indonesia Higher Education, Prasetio et al. (2017) sought to determine the connection between lecturer professional competency and student academic performance in higher education. The article was published in the International Journal of Human Resource Studies. It asserts that in an environment where there is increased competition to provide better

education, higher education institutions should focus on boosting their students' academic performance. According to the study, student grades reflect performance and help recently graduated students who are looking for jobs. It contends that higher education institutions should enhance cognitive abilities in addition to improving mental attitudes. Proficiencies of lecturers are a significant factor that can help to improve cognitive abilities. As a result, lecturers should be extremely knowledgeable about the subjects they teach. To make their lectures more engaging, lecturers should also have real-world experience. The results indicated that there is no significant relationship between professional competency and students' academic achievement. The thorough discussion offered fresh perspectives on various factors that could affect performance.

Teachers' variables predict students' academic performance. The relationship between a few key lecturers' variables and students' academic performance in Nigerian universities was examined by Adeyemi (2017) in a paper that was published in the Journal of Social Sciences under the title Lecturers' Variables as Predictors of Academic Performance in Universities. The findings from a questionnaire and purposive sampling methods revealed that, with the exception of lecturers' prompt delivery of result feedback to students, all the lecturers' variables under investigation significantly influenced students' academic performance. While discussing the teachers' factors that affect students' performance, this study is similar to the present study in that it does not suggest that these factors can be improved by a quality assurance system.

Victor and Babatunde (2014), assert that academic performance in higher education is significantly influenced by motivation. The population of the descriptive survey-style study included all of the lecturers and department heads at Adekunle Ajasin University in the Ondo state. 50 professors and 10 department heads were randomly selected to participate in the study. The study made use of a questionnaire, and a frequency count and a straightforward percentage were used to analyze the data. The findings showed that encouraging creativity and innovation, praising sincere effort, bestowing titles of distinction, and acknowledging accomplishment all improved the performance of university lecturers. The study also showed that lecturers' performance is enhanced when adequate opportunities for professional growth and instructional facilities are provided. In order to enhance the performance of lecturers, it was advised that university administrators and other tertiary institutions maintain adequate opportunities for professional development and research advancement, among other things.

Teaching and learning can only produce desired results when the attitudes of the key actors, the teachers are favourable to the process. Ekperi, Onwuka, and Nyejirime (2019) examined teachers' attitudes as correlates of students' academic performance in geography in an article titled "Teachers' Attitude as a Correlate of Students' Academic Performance" that was published in the International Journal of Research and Innovation in Social Science (IJRISS). The study claims that a teacher establishes the atmosphere in the classroom, and that atmosphere is influenced by the teacher's attitude. It goes on to say that a person's attitude greatly affects their behavior, which in turn affects how they interact with other people. This attitude has an impact on students' academic success, according to teachers. It used a sample size of 400 participants and a descriptive survey design. There were two research questions used. The research questions' responses were examined using the average mean score, while the hypotheses were tested using multiple regression analysis. The findings show a positive and significant relationship between teachers' attitudes and students' academic achievement as well as a poor government opinion of teachers, a lack of job satisfaction, insufficient pay, and a dearth of teaching resources. Therefore, it was advised that teachers should focus on interpersonal aspects of teaching rather than just instruction and that they should receive ongoing in-service training. Again, there should be plans for teachers to attend regional and international educational conferences in order to enhance their output.

Teacher characteristics has an impact on students’ academic performance especially in public schools. (Ekperi, 2018). The study adopted the descriptive survey design and used the Taro Yamane sample size formula to select four hundred people from a total of nine hundred and sixty – eight. Two research questions and hypotheses were used in the study, and responses to the research questions were analysed using the average mean score. To ascertain whether there is a relationship between student academic performance and teacher characteristics, the five hypotheses were put to the test using multiple regression analysis. The findings of the study show a significant and favorable relationship between teachers' subject-matter proficiency and their students' academic performance. It also recommended, among other things, that the Teachers' Registration Council of Nigeria regularly implement tests and examinations for teachers based on the standards in order to ensure that they carry out their duties effectively and in accordance with the standards of the teaching profession.

According to Obiekezie et al. (2016), Quality assurance variables such as the availability of qualified staff, students' study habits, the prompt publication of results, the accessibility of equipped laboratories and funding are among the essential conditions for achieving high academic standing. The study made use of lecturer perceptions of factors important to quality control in Nigerian universities. 500 professors from public universities in the South-South geopolitical zone responded to a 25-item survey. Five research questions were posed, and descriptive statistics were used to analyze and present the data. The results showed that lecturers thought the most important elements in ensuring academic quality were students' study habits, the availability of a sufficient number of qualified staff, the prompt release of exam results, the accessibility of well-equipped laboratories and workshops, and tertiary education funding. This study is pertinent to the current study because it specifically compares lecturers' perceptions of quality assurance variables in tertiary education in Nigeria. However, it is unable to identify ways to raise the standard of tertiary education and link it to students' academic performance.

University leadership styles play an important role in students' academic performance. Gyasi, Xi and Owusi-Ampomah (2016) in a study to explore the effects of leadership styles on academic performance in Junior High schools in Asonomaso Nwanta in Ghana. The design for the study was mixed study using both the qualitative and quantitative analysis. It was a correlation survey designed to establish the relationship between leadership styles and academic performance in schools. Academic performance served as the independent variable, and data were collected on leadership philosophies of the school administrators. The Statistical Package for Social Science (SPSS) version 21.0 was used in conjunction with Epi-Info, a program for gathering and analyzing data. The study found that headmasters lack the knowledge and leadership abilities needed to understand whether they have any influence on the academic programs at their institutions. Although respondents agreed that a leader's approach can affect students' academic performance, the study also revealed that headmasters frequently struggle to win over stakeholders and forge agreements that can raise the bar for instruction and learning. Based on these institutions, it was advised that teacher training institutions include training in the art and science of leadership in their curricula in order to develop leaders from an early age. Again, it is recommended that compulsory continuous professional development in leadership should be institutionalized in Ghana Education Service for headmasters.

Environmental factors play an important role in the teaching and learning process and affects quality of education. In a dissertation, "Quality and Quality Assurance in Ethiopian Higher Education: Critical Issues and Practical Implications," Kahsay (2012) explores the environmental factors (internal and external) that either support or inhibit quality assurance practice for enhancing student learning. She critically examines quality and quality assurance in the context of higher education in Ethiopia. The study's findings provided insightful information about how internal quality assurance is implemented and used at universities. The findings show that rather than a dearth of laws, policies or structures, the main obstacles preventing the adoption and implementation of internal quality assurance at universities are a lack of professional capacity, integrity and commitment in human element. This suggests that initiating and introducing laws and regulatory bodies are necessary but insufficient conditions to affect quality assurance practices in universities unless there is a supportive environmental context. It addresses both internal and external quality assurance in Ethiopian universities, despite the fact that it does not mention student assessment as a quality assurance strategy. Though the study was carried out in Kenya, the key issues raised on internal and external quality assurance are relevant to the present study. However, the present focuses on internal quality assurance strategies in predicting students' academic output.

According to Kongnyuy, and Wemba, (2014), a satisfied worker is a productive worker and the teacher quality is a determinant to students' academic achievement. Therefore, the study looked at how lecturers at the Higher Teachers' Training College in Bambili responded to their job demands. Three hypotheses, a questionnaire, and four research questions were all used in the study. Data analysis was done using descriptive and inferential statistics and SPSS version 20. The study found that the performance of lecturers at work is significantly impacted by all of the indicators of job satisfaction, including pay, staff welfare, and working conditions. In many ways, this study is pertinent to the one we are doing right now. It presents the importance of human resource management by university authorities and government in motivating lecturers to be able to improve their performance, towards attaining Vision 2035 of Cameroon being an emergent economy. Though related, the study does not specify that this is a quality assurance strategy that must be sustainably adopted.

Dhaqane and Afrah (2016) examined the impact of student satisfaction on academic performance and student satisfaction and academic performance. They also examined the relationship between

student satisfaction and academic performance as well as other factors that affect academic performance. The research at Banadir University in Somalia found a significant correlation between students' satisfaction with their academic performance and a sample of 133 students from the third and final years. Happiness promotes both academic success and student retention, according to the study.

The student-teacher ratio has an effect on students' learning and academic performance in public universities in Cameroon (Etome and Lyonga, 2017). The study examined how the three student-teacher ratio constructs such as class size, instructional strategies and teacher workload affect students' academic progress and performance at public universities in Cameroon. In order to gather information from 39 teachers and 101 students at the University of Buea, a survey research design and both closed- and open-ended questionnaires were used. Descriptive statistics were used to analyze the quantitative data, while the thematic approach was used to analyze the open-ended questionnaire. The results showed that student learning and academic performance are influenced by class size, teacher workload, and teaching method as constructs of student-teacher ratio in Cameroonian public universities. The study, like this one, recommended building more classrooms to decrease overcrowded classes as student populations increased. It also advised educational planners to ensure a corresponding increase in infrastructure and qualified teachers. Additionally, the study analyzes data. While the study focuses on student- teacher ratio in the University of Buea which is just an aspect on internal quality assurance, the present study duels on the University of Yaounde 1 and discusses more strategies of internal quality assurance.

Ashu and Lavngwa (2022) conducted a study to assess the effectiveness of internal stakeholders' provision of high quality leadership in putting into practice the Cameroonian government's reforms for equal access and professionalizing educational leadership in higher education. The findings indicated that the goals of laws No. 98/004 of April 1998, decree No. 93/034 of January 1993, and law No. 005 of April 2001 on the orientation of higher education in Cameroon are not being adequately pursued by the Cameroon Ministry of Higher Education. These conclusions were drawn from research materials, field notes, and transcripts of interviews with 8 University of Buea academic staff members and 4 students. The findings suggest that the Ministry of Higher Education and Faculty of Education should keep an eye on the growth of the elite leadership in the provision of equal access and professionalization of educational leadership. As credentials that could provide

the government with more authority, the Postgraduate Diploma, Master of Education in Empowering Educational Leadership, and Doctor of Education are suggested. It makes the case that society has a moral duty to ensure that its members receive a sufficient education that equips them with the knowledge and abilities they need to advance their society. This study is relevant and recommends that university and education leadership should be open and proactive.

Doh and Doh (2013) suggest that higher education continues to be a corps of excellence with selectivity as one of its operational dynamics. They discuss performance-based funding dynamics for the enhancement of strategic objectives in higher education in sub-Saharan Africa and look at the case of Cameroon. They contend that even if higher education were to become entirely accessible, some of its objectives and functions would remain exclusive and more strategic, requiring managers and administrators of higher education to make very challenging decisions. The possibility of performance-based funding as one of the mechanisms for priority enhancement and differential funding concentration is suggested by this scenario. The study looked at the staff development grant program at the University of Buea in Cameroon, which used performance funding instruments to raise the school's profile in its teaching and research—at the time, a strategic priority. The findings imply that performance-based funding may have significant benefits for increasing the responsiveness of other strategic goals of higher education in the country's context. This study is important in projecting the relevance of incentive to the output of teachers and certainly, like the present study it will improve students' academic performance. However, unlike the current study goes beyond the granting of incentives through staff development grants and to teachers to discuss other strategies that promote academic performance of students.

The university authorities should engaged in practices that ensure continuous development of lecturers to ensure their job efficacy. Akpan (2014) conducted a study to determine how lecturers' job effectiveness in two universities in Nigeria was impacted by their ICT proficiency. The study used a survey design, and a population of 1795 teachers was used to select the study sample using a simple random sampling technique. To gather the information that was analyzed, a self-made questionnaire was used. The findings showed that lecturers with high ICT proficiency outperformed those with moderate and low proficiency in research, publications, communication, and record-keeping in the classroom. The results of this study also showed that lecturers' use of

ICT significantly improved their ability to perform their jobs. Based on these findings, it was recommended that lecturers be motivated to improve their ICT skills because doing so has been shown to increase job efficacy for high productivity. For lecturers to be more effective at their jobs, university administration should encourage them to take part in ICT training programs and provide ICT facilities in their offices.

University Learning Resources and Infrastructure

Learning resources and infrastructure are important in the teaching and learning processes and any quality assurance effort should consider putting in place resources that should promote quality learning. According to Yaro and Otieno (2010), the Kenyan educational system is improving steadily despite a number of drawbacks, including insufficient teaching and learning resources in secondary schools as a result of poor planning and corruption. The study looked at how teaching and learning resources impacted students' academic performance in secondary school mathematics in the Bondo district of Kenya. The population of this study consisted of 405 seniors, and the research design was a descriptive survey. 242 students from nine schools out of a total of 24 in the three Bondo district divisions were selected at random. All of the classes were present. The various strata of schools included co-educational day, co-educational boarding, boys boarding, and girls boarding. Student questionnaire on performance, which was one of the research tools created for the study was validated. There were solutions to three research questions. The data was gathered, and multiple regression analysis was used to analyze it. The eight independent variables and the dependent measure, math performance, had a positive correlation (R= 0.486; F(8,241) =9.014; p0.05). The independent measure's total variance was 23.6% explained by the eight variables (R2= 0.236). Government funding (B=0.182, t=2.469; p0.05), teachers with training (B=0.341, t=3.489; p0.05), classrooms and laboratories (B=-0.347, t=-4.173; p0.05), and textbooks/student-to-teacher ratio (B=0.413, t=4.186; p0.05) could all be used to predict academic performance in mathematics. The study suggests that the government and all stakeholders should pay more attention to certain factors in order to improve performance in mathematics, including curriculum review, in-service training for teachers, hiring more competent teachers, motivating students better government support for education, effective teaching strategies, increased student to book ratios and better teacher compensation.

The availability of infrastructure and teaching resources are important requirements for effective teaching and learning process. Therefore, university stakeholders should adopt the provision of up to date infrastructure and teaching resources as an important relevant internal quality assurance strategy. Singh and Kumar (2017), in studies carried assess the impact of institutions' available infrastructural facilities and teaching - learning resources on academic attainment of students. The current study is a modest attempt to evaluate the effects of teaching-learning resources and infrastructural facilities on the academic success and job placements of management graduates from particular Bangalore-based B-Schools. The results strongly support the need for having all the required physical infrastructural facilities and teaching-learning resources on the campuses of the B-Schools for more effective and efficient knowledge delivery, which is a prerequisite in any knowledge-based economy, as analysis of the captured data from two Bangalore B-Schools reveals a positive correlation between the variables under study. Further, the study has made certain pointers for consideration of the concerned stakeholders, if India has to globally emerge as a competitive quality education provider.

Infrastructural and pedagogical materials have an important role to play in student learning and consequently on their performance. Jamil et al (2018), argue that though school enrolments at both primary and secondary levels have increased in Pakistan, there are serious concerns about quality of education. Using a sizeable data set from 23 districts in Khyber Paktunkhwa, which included 1642 schools, the researchers studied the factors that influence how well schools perform. The results demonstrate that the institution's school performance is positively impacted by electricity, gas, the library, and teaching quality. Our findings, however, indicate that the science lab and the playground have no bearing on students' academic performance. According to the findings for rural and urban schools, electricity and gas are beneficial to rural schools. It suggested that these fundamental amenities are crucial for rural schools' improved academic performance. It also showed that students in well-built schools in rural areas perform better. Electricity, gas, infrastructure, and teaching quality should thus be given priority when allocating public funds.

Learning infrastructure promotes learning and therefore can affect students' academic performance. The implementation of learning should, in theory, focus on both student learning process and learning outcomes (Nugroho and Wibowo ,2019). Activities and creativity in students are developed through a variety of interactions and educational experiences. A crucial aspect of

learning is the development of student learning engagement. Schools need infrastructure that affects student learning in order for education to operate at its peak. This study looks at how school infrastructure can affect how eagerly students learn. This study explains how school infrastructure affects learning, how it is developed to improve learning outcomes, and how it is used to raise the level of student engagement in their learning, which includes both physical and psychological activity.

The efficient use of educational infrastructure is essential to students' learning. In Kajara County, Ntungamo District, Ahumuza (2020), in a dissertation, investigated the impact of school infrastructure utilization on students' academic performance. The following objectives served as the study's guiding principles: to establish how physical, health, and sanitation infrastructure in Kajara count y, Ntungamo District affect students' performance; to examine how co-curricular infrastructure in Kajara count y, Ntungamo District affect students' performance. The researcher used a cross-sectional survey design with both qualitative and quantitative methods. The study participants included candidates from candidate classes, head teachers, teachers, and health care providers. 18 teachers, 6 head teachers, and 118 students, and 6 health officers made up the sample size of 148 respondents. Both questionnaires and interviews were used in the study as data collection methods. After gathering, editing, coding and entering the quantitative data into the computer us Statistical Package for Social Sciences (SPSS), The Pearson product moment correlation coefficient was used to examine the relationship between the independent and dependent variables. Analyzing qualitative data involved using thematic analysis. According to the study, there is a significant link between physical infrastructure and students' academic achievement. This demonstrates that academic performance is very likely to be at a high level when a school has a sufficient physical infrastructure. The study found a weak but significant relationship between co-curricular amenities and students' academic success. This shows that while extracurricular activities are important for affecting students' academic performance, their impact depends largely on other factors. The study also found a significant positive correlation between the accessibility of health and sanitation facilities and students' academic performance. This suggests that the academic performance of secondary school students is significantly influenced by the hygienic conditions there. Therefore, it can be assumed that physical infrastructure in Kajara County's Ntungamo District has a strong, significant relationship with students' academic performance. According to the study, public secondary schools should receive

more funding from the government for the construction of adequate learning facilities, whereas private secondary schools should be required to do so.

School infrastructure plays a key role in students' academic performance. For instance, Mgimba and Mwilla (2022) looked into the impact of infrastructure issues on students' academic performance in a study. Its objective was to outline the challenges faced by school administrators when trying to improve the physical infrastructure of rural public secondary schools in the Iringa District in order to boost student achievement. The study used a mixed methodology and convergent parallel research design. The hierarchy of needs theory, which Abraham Maslow developed in 1943, was used to support the study. 151 respondents-48 teachers, 97 students, 5 school administrators, and 1 district education officer-participated in the sample size out of a total target population of 22,457 people. Simple random sampling and purposive sampling which combine probability and non-probability, were used to select the respondents for the study. The information was gathered using observation, questionnaires, and interviews. The quantitative data were analyzed using descriptive statistics in the Statistical Package for Social Sciences (SPSS) version 21 while the qualitative data were coded and organized using a thematic analysis. The study's findings demonstrated that inadequate school infrastructure, including a lack of classrooms, labs, libraries, dormitories, and instructional materials, was a factor in students' subpar performance in rural public secondary schools in the Iringa District. This study came to the conclusion that excellence and growth require the creation and upkeep of a high-quality educational system. Inadequate infrastructure has a negative effect on student performance. The study recommended that the government increase funding for schools in collaboration with other stakeholders in order to provide and support adequate teaching and learning materials in addition to the basic infrastructure in secondary schools.

If learning resources like library resources are accessible and effectively used, learning would be facilitated, which would impact students' academic performance. Mogaka (2019), in an article titled "Availability and Utilization of Library Resources on Students' Academic Achievement in Public Day Secondary Schools," published in the International Journal of Research and Innovation in Social Science (IJRISS) |Volume III, Issue VIII, examined the connection between the availability and utilization of library resources and students' academic achievement in Kenyan public day schools. The study used a correlational research design and involved both secondary

school teachers and students. Three sampling techniques were used to collect data from students using a questionnaire and from teachers using a schedule of interviews that was both quantitative and qualitative. Inferential statistics, Pearson's Product Moment correlation, and multiple regressions were used to analyze quantitative data. Direct quotations from the analysis of qualitative data were used in the report. The study discovered that the majority of day secondary schools lacked adequate library resources and came to the conclusion that there was a connection between the library's availability and use and students' academic achievement. To improve students' academic performance, it was advised that well-equipped libraries be established in all public secondary schools.

Large class sizes affect the teaching and learning processes and consequently the students' academic performance. To Kusi and Manful (2019), in their article Class Size and Academic Performance of Students in Selected Nursery and Midwifery Training Colleges in the Central Region, Ghana, which was published in the Advances in Social Sciences Research Journal, looked into the effectiveness of tutors' use of class size management strategies to improve students' academic performance at Selected Nursing and Midwifery Training Colleges in a Region of Ghana. It claims that having large class sizes is a major challenge in the majority of Ghana's public tertiary institutions. This study was conducted using a pragmatist paradigm-based research methodology. 131 students and 56 tutors were selected using a variety of sampling techniques. Data was gathered using two related questionnaires and a semi-structured interview guide. The data were analyzed using both descriptive statistics and inferential statistics. The study found that class size had an impact on students' academic performance, with students in smaller classes performing better than their peers in larger classes. The study's conclusion was that classroom size has a significant impact on students' academic performance at all levels. It was discovered that there was an inverse relationship between classroom size and academic achievement. Small class sizes are therefore necessary to ensure students' meaningful academic performance. The study based on these findings, recommended that management of colleges should pay attention to the class sizes so as to ensure good academic performance.

Class sizes and student-teacher ratio can be so demanding to teachers and certainly affect the teaching and learning process. Ngoboka and Schultz (2002) researched on the impact of class size on students' academic performance in the principles of Microeconomics course. The interview

Professors who believed that large class size would hinder students' ability to learn. The study found that having large class sizes affects student learning and performance. The data used in the study came from student surveys, university records, instructor grades, and attendance records.

The process of teaching and learning can be aided by the development of efficient information and communication technologies (ICT). Ishaq, et al. (2020) claim that they attempted to categorize the various effects of ICT on tertiary education in their article titled The Impact of ICT on Students' Academic Performance in Public Private Sector Universities of Pakistan published in the International Journal of Innovative Technology and Exploring Engineering (IJITEE). They contend that students must use information and communication technology (ICT) in all facets of their lives because it is now pervasive and essential. Descriptive statistics and the Pearson correlation coefficient were used in the study to analyze the data. The findings indicated that the majority of students owned laptop computers and had access to the internet at their universities. Many students claimed that they utilized ICTs to enhance their fundamental abilities and engage actively in their learning. Additionally, it has been proven that students have benefited significantly from the effective use of ICTs.

In the 21st century, information resources play key roles in the teaching and learning processes and on students' academic performance. In a study, Kapur (2016) sought to acquire understanding of the effects of information resources on academic performance. Information resources, factors affecting of e-learning on academic performance are main topics that have been considered in this research. He contends that the use of information resources in educational institutions such as colleges and universities has made it possible for staff, students, and teachers to carry out their responsibilities in a manageable way. The study demonstrates that by utilizing these resources, people are able to enhance tasks and activities, produce information about various topics, and streamline communication processes. The World Wide Web (WWW), electronic information resources, the technology acceptance model (TAM), and information and communication technologies (ICT) are some examples of information resources. However, to be able to make use of information resources, then they need to process competencies and aptitudes that are needed to operate them in an effectual manner. After reading this research paper, one is able to acquire a clear understanding that information resources have rendered an effectual contribution in enriching

the overall system of education. While this is just one way to improve performance, this present study presents other strategies that affect the academic performance of students.

If information and communication technology is fully embraced, African higher educations' transformation will fall short. According to Onuka (2015), providing teacher education to tertiary education will be ineffective if the beneficiaries are resistant to using ICTs or other digital technologies. It is also essential to use digital technologies for teaching and learning in order to transform African higher education institutions and ensure the delivery of high-quality higher education. Africa won't be able to catch up to the so-called advanced nations if we ignore the use of ICTs. It is an indispensable tool and device for effective communication, which is a crucial management tool, in the management of Higher Education. The higher education accounting system cannot be manually altered (Onuka, 2017). ICTs facilitate learning and teaching, and they also function well during exams. The use of digital technologies for effective and ongoing HE transformation for the sustainable development of Africa is therefore imperative for all parties involved in HE provision.

Information and communication technology (ICT) is now acknowledged as a crucial tool for any country's development, particularly in the age of globalization. Ajayi and Asubiojo (2017) examine the roles of ICT in teacher education in Nigeria with a view to ensuring instructional effectiveness in their paper. The paper argues that among other things, ICT provides opportunities for teacher professional development, transforms instruction, grants teachers access to networks, and raises the bar for student learning. As a result, ICT education, which includes Nigerian tertiary education, is one of the beneficiaries of the National Policy on Education (NPE 2004). Science and technology, in particular Information and Communication Technology (ICT), will soon play crucial roles in almost every stage of the educational process in tertiary education. The paper lists a few obstacles to the efficient use of ICTs in Nigerian teacher education programs, such as inadequate funding, subpar power supplies, and inadequate technical facilities. It recommended that the government and all the stakeholders in the educational system should wake up to their responsibilities by providing ICT facilities for effective instructional delivery system in teacher in Nigeria.

Tetty (2016) examines the difficulties that teachers encounter in gaining access to instructional materials and evaluates the tactics that teachers employ to reduce these difficulties in an effort to

determine the extent to which the chosen secondary schools in the Rombo District utilize quality and adequate instructional materials in classrooms and how this has promoted student academic performance. Data were gathered using a cross-sectional survey design in which 5 out of 38 schools were randomly chosen, along with 5 teachers and 20 students from each of those schools. Additionally, all of the school administrators and one secondary district education officer were interviewed using the interview guide. The results showed that instructional materials, which were in short supply in the schools, were crucial to both teachers' and students' performance. Additionally, it showed that teachers employed a variety of techniques to lessen the difficulties associated with locating and utilizing high-quality instructional materials, and it suggested that the government set aside enough money to increase the accessibility of educational resources across the board for secondary schools. This study is relevant in that it is discussing on the relevance of instructional materials which are learning resources widely discussed in this present studies amongst others. However, the study is limited only to instructional materials and uses the cross sectional survey design meanwhile, the present study focuses generally on learning resources and other strategies of internal quality assurance and uses a correlational design. The present study therefore, is an expansion of this study.

The availability and utilization of educational resources has an influence on students' academic performance (Agbonghale and Adavbiele, 2018). For the study, the researcher used a survey research design. With the aid of research assistants, 143 respondents were given the research instruments and two research questions were posed. With the help of percentages and the mean, data was analyzed. The results showed that although the institution had an adequate number of teachers, the carpentry and joinery tools were woefully inadequate. The government and school authorities were then urged to make sure that students had access to pertinent resources in order to boost their academic performance. The study is related to the present study in that it discusses the importance of educational resources though it is limited because it excludes other aspects of school functioning that have effects on students' academic performance.

Since the Bolgna process Quality Assurance (QA) agenda was not adopted, there are still some unresolved quality issues in Cameroonian higher education (Vuban, 2019). In 1999, the European Bologna Process strengthened higher education's (HE) quality assurance (QA). Even though Cameroon is a signatory non-member state to the Bologna Process, there are still many unresolved

quality issues in its HE system as a result of the Bologna Process' incomplete implementation, with some action lines being adopted but others not, such as the QA component, which is a neglected part of the Bologna Process in Cameroonian higher education. In light of the Bologna Process, this article examines some ongoing problems with Cameroonian higher education quality. The study's qualitative research design includes focus group discussions and interviews. Findings call into question the standard of student admission, regular supervision, mentoring, or follow-up, the availability of adequate educational resources, and university rankings. The article calls on higher education institutions in Cameroon to reconsider the Bologna Process as a method rather than an event, with more action lines adopted, such as QA, and the use of Total Quality Management (TQM) principles as practical approaches used to address quality issues in Higher Education. The study discusses how crucial the Bologna process is to ensuring the quality of higher education, but it also casts doubt on Cameroon's ability to achieve quality based on the process given its numerous shortcomings. The current study, though drawing from the Bologna process, focuses on the internal quality assurance strategies in planting and monitoring quality.

The existence of modern, up to date institutional infrastructure affect the quality of teaching and learning and so, students' academic performance. Another study was carried out by Sosibo (2006) titled *Students' Perceptions of Availability of Infrastructure and Resources in a Faculty of Education: A Transformative Agenda* presented in 2019 during The IAFOR International Conference on Education – Hawaii argues that during the Apartheid era in South Africa, the resources were distributed unequally and after 1994, the country obtained its democracy. For universities to receive an equitable distribution of infrastructure and resources, funding needed to be adjusted. Despite the State's efforts to close this gap, literature suggests that it is difficult for Black universities with limited resources to catch up. Resources and infrastructure have an impact on teaching and learning, according to a large body of research. In a faculty of education, the availability of resources and infrastructure was the subject of this study. What do students think about the infrastructure and resources that are available in a faculty of education? 254 Bachelor of Education students were used as a purposeful sample. Closed-ended surveys with the Likert scale's five categories were used to gather quantitative data. Each questionnaire item is subject to descriptive statistics for data analysis in order to calculate the mean score and the distribution of scores, which were then displayed as bar graphs. The majority of students had negative perceptions of infrastructure and resource availability, according to the results. In order to provide high quality

education and ensure the success of all students, transformation of the teaching and learning spaces needs to be prioritized. This is because infrastructure and resources have an impact on teaching and learning.

Omae, Onderi, and Bernard (2017) posit that learning infrastructure is a key base for effective teaching and learning in schools. They view infrastructure as a crucial component of a successful educational system. To evaluate the quality effects of learning infrastructure on secondary education in Kenya, the study used the sequential explanatory design and the Production Function Theory. A mixed-methods approach was also used. A total of 362 participants were surveyed and interviewed to gather data for the study, which discovered a connection between student achievement and school infrastructure.

In a study to examine the impact of crowded classrooms on academic performance of public secondary school in Lagos state of Nigeria, investigated the factors responsible for over-crowding of classrooms. Again, the study examined the effects of classroom overcrowding on student attitudes and behavior as well as the effects of overcrowding on teaching and learning. The population of this study consisted of all of the teachers and pupils in the public secondary schools in the Surulere Local Government of Lagos State. A total of thirty (30) students and ten (10) teachers were randomly selected from the four selected schools. A total of 160 students, or 40 per school, were chosen for the study. For the study, data were gathered from both primary and secondary sources. After gathering the data, descriptive and inferential statistics were used to analyze it. The findings showed that 97.3% of respondents believed there to be a lack of infrastructure facilities. According to the results, 97.3% of the sample thought there was a lack of infrastructure facilities. More so, it showed how crowded classrooms hinder effective instruction and learning. The analysis also revealed that overcrowding in the classroom was the primary factor contributing to students' subpar performance in public schools and had a negative effect on their academic performance. The study came to the conclusion that classroom overcrowding had a significant impact on student behavior and attitude toward their studies.

Student Profile and Support Services

Student admission policy would determine the academic performance of students at the end of the year. Strengthening the Internal Quality Assurance Mechanisms in the University is the title of a

2013 paper by Efanga, Ogbod, and Nwoko that looked at various strategies for improving internal quality assurance in universities. Included in the scope are the policies governing student admission, hiring and selecting academic staff, academic program policies, monitoring instruction and teacher effectiveness, creating a conducive learning environment, and having a clear policy on measuring and evaluating learning outcomes. In order to guarantee academic quality, the paper acknowledges that universities should be free to choose and establish their own standards and requirements for enrolling students in their various academic programs. It is a necessary task because a system that does not guarantee the quality of its products will eventually start to degrade in today's highly competitive global market.This study is relevant because it raises key concerns of the present study such admission policy, recruitment, selection of staff, curricula activities and supervision of instruction which are very vital in the teaching and learning process in university. However, the study runs short of indicating that if strategies are not set and applied to ensure the effective implementation of those key elements, the effect to the teaching and learning process may be negative. The latter therefore makes the present study relevant.

Most higher educational institution organize entrance examinations or admission tests for applicants seeking to enroll in order to determine the predictive power for admission to medical school and success in medical education. Gautam et al. (2012) conducted a study to look at the relationships of scores obtained in educational, medical entrance, and other professional examinations in a cohort. Scores from grades 10 through 12 for medical entrance and professional examinations of undergraduate medical education were evaluated for the research on a total of 118 medical students who entered medical school only on the basis of an open competitive medical examination between 1994 and 1998. The results showed that the outcomes of public and private schools management in grades 10, 12 did not affect student selection for admission to MBBS program. These students' average grade 12 scores had no bearing on whether they were admitted to the medical program ($r= 0.08$, $p= 0.37$), but they did have an impact on how successful they were in their medical education overall ($r= 0.32$, $p= 0.00$). Grade 12 physics test results were still a strong predictor of success in medical school ($r= 0.19$, $p=0.04$). The current medical school student selection criteria are insufficient and should take other candidate characteristics into consideration.

Students perform poorly because they did not meet the entry requirements (Mudavanhu, 2011). Data for a study that was primarily qualitative was gathered using interviews and written materials. Finding patterns between students' entry requirements, prior experiences, and performance in the science course involved data analysis. The lecturers' inability to teach students they felt were unsuitable for the course due to pedagogical issues and the fact that the students who had registered for the course did not meet the entry requirements for the course were suggested as causes for the low performance in the science course that was the subject of the investigation. In the science course under investigation, there appears to be a connection between entry requirements and exam performance. The study recommended changing up the science course for students from various backgrounds without sacrificing the program's quality. The university needs to develop a thorough orientation and mentoring program for new hires as well as a staff development program to give lecturers the knowledge and abilities they need to teach students who are at risk of failing. It is advised to conduct additional research with a sizable sample size and population to determine the relationship between entry requirements and scientific performance.

Since it is a major determinant of an institution’s quality, academic performance of students has always been a source of concern for educational institutions. In a study, Mirza and Abdullah (2018) make the case that in order to produce work of a higher caliber, higher education institutions set admission requirements such as scores on specific international standardized tests, prior academic achievements, and admission tests of students, or a combination of such scores. In order to support students who, for a variety of reasons, are unable to enroll in conventional higher education institutions, the Virtual University of Pakistan (VU) is a technologically based distance learning institution. The researchers were interested in investigating how students' entry requirements, or admission criteria, could be used to predict how well they would perform academically in various degree programs. The entry requirements of students and cumulative scores of their prior academic qualifications were used as indicators of their performance, or cumulative grade point average in the relevant degree program. After grouping the students into low, average, and high achievers based on their cumulative scores and entry qualification scores, descriptive (range, percentage) and inferential (Pearson r, multiple regression) statistics were applied. The findings revealed sizable discrepancies between the predictions, and their ramifications are helpful for policymakers, the university's relevant departments, and other distance learning educational institutions. Though

the study duels on a virtual university, it raises pertinent, relevant and related arguments for entry qualifications predicting students' academic performance.

Again, Oyebade, Oladipo and Adetoro (2012) sought to determine the connections between meeting minimum academic standards and university age, between student enrollment and university capacity and between the caliber of output and job performance of university graduates. According to this study, there is no connection between being of university age and having a minimum GPA. Additionally, it shows a strong relationship between student enrollment and university carrying capacity. The quality of graduates from Nigerian universities and their performance on the job were found to be strongly correlated. The study then lists the subsequent quality control tactics: According to Lankard (1992), total quality management (TQM) entails interdepartmental meetings, a strategic implementation framework, and academic standards and quality. Describe the educational procedures, learning opportunities, and materials to be used. Provide training to teaching staff in pertinent areas of student management systems, educational design and pedagogy, ICT use, policy, and procedures in order to support staff. The study highlights key issues in focus in the present study but fails to link them squarely on students' academic performance.

According to Obiezezie et al (2015), Nigerian university graduates' level of job performance, ability to compete internationally, and competiveness are pressing issues. Since then, harsh criticism has been leveled at the academic standards of Nigerian universities. This study looked at how university lecturers in Nigeria perceived various factors crucial to quality assurance because they are major players in ensuring the quality of universities. In the South-South geopolitical zone, 500 professors from public universities completed a 25-item survey. Following the emergence of five research questions, descriptive statistics were used to examine and present the data.. The results showed that lecturers thought that the accessibility of well-equipped laboratories and workshops, the availability of a sufficient number of qualified staff, students' study habits, the prompt release of examination results, and tertiary education funding were the most important factors in ensuring academic quality. For student support, describe the nature and content of student and staff records and specify who is in charge of keeping them up to date. Specify the locations, scope, standards of service, and accessibility of student support services, as well as acceptable rates of student progression and retention. The study is important because it opens up

to the key quality assurance variables which can influence the academic achievement of students. It however, fails to go further to show clearly how; the variable can affect the students' academic performance.

For quality education to be achieved universities should establish criteria for student admission and make clear effort in providing and improving student support services which are vital for the teaching and learning process. In a study, Kwabena and Agyiri (2020) examined how student support services affected distance education students' academic performance. Descriptive survey methods and correlational analysis were used in the research. The sample was composed of 342 individuals and was selected using simple random, stratified, and purposeful sampling methods. The instruments used to collect the data were a questionnaire and test results. Both Pearson Product Moment Correlation and multiple regression analysis methods were used to analyze the study's data. The research revealed that the face-to-face element gives colleagues a chance to interact, create social bonds, and has the added advantage of enabling them to pick up knowledge from other students. It also showed how the use of educational materials helps students' intellectual development and the accomplishment of teaching and learning objectives. According to the study's findings, the College of Distance Education at the University of Cape Town should keep making sure that face-to-face contact sessions are conducted in a way that the needs of distance education learners and ensuring the process of continuous improvement of the distance education program.

The entry characteristics of students are important in the academic performance. In order to better understand how student support services affect students enrolled in national certificate vocational qualifications in Motheo District, Free State Province, South Africa, and how they affect students' academic success, Mainmane (2016) conducted a study. In January 2007, the Department of Higher Education and Training implemented the National Certificate of Vocational (NCV) program in colleges of Further Education and Training. The entry requirement for this qualification is grade nine. However, ninth through twelfth graders have expressed interest in obtaining this qualification. For the NCV qualification, students from various educational backgrounds and needs enroll. For these diverse students to maximize the opportunities provided by the college, an adequate student support system is essential. Once students understand what the college does for them, the college will operate effectively and to its full potential. To collect the data, a random sample of 120 students-85 females and 35 males-was used. Data was gathered using a combination

of methods. Students who had signed the consent form to participate in the study were asked 13 questions about student support services. The analysis of the data was done using Microsoft Excel 2010. The findings suggest that, if coordinated well, student support services could make a significant difference in students' academic success and access to more opportunities.

Student support services have a pivotal role in enhancing student persistence and by extension students' academic performance. Arifin (2018), carried out a study aimed at exploring the contribution of student support in increasing student persistence by collecting the mixed methods approach. The continuation of enrollment is referred to in this study as student persistence. In this study's sequential explanatory design, 153 students were surveyed to gather quantitative data, which was then followed by semi-structured interviews with 13 carefully chosen participants. The study's quantitative phase's findings showed that student support was a significant factor in encouraging student persistence. The qualitative results corroborated the survey findings, which showed that student support was a key factor in determining students' persistence. Additionally, this study recommended enhancing affective, cognitive, and systemic student support in order to increase student persistence.

Student support services (SSS) encourage student engagement and impacts their learning. In a study conducted at three technical colleges in upstate South Carolina, Kelley Hall (2010) investigated the role of Student Support Services (SSS) in promoting student involvement and its effects on students' perceptions and academic experiences. By considering Alexander Astin's theory of student involvement in the services provided by the program, it may be possible to better comprehend the current responsibilities of SSS. The study's findings can help a wide range of college students by providing them with more knowledge about the college experience. It aided in a better understanding of the unique experiences of SSS participants in order to better meet their needs. In order to explore the role of SSS qualitative methods were employed to conduct this research within the population of three Student Support Service programs housed in South Carolina's upstate technical colleges. In the spring of 2009, focus groups with a total of 100 students were held. The focus group transcripts were thematically analyzed for this study. Astin's theory on student involvement, Tinto's model on student retention, and the effects of the SSS Program on participant involvement in school, student perceptions, and academic experiences were all supported by the results, which also provided evidence for Astin's theory. Participation

has a broad impact on program participants' academic confidence, focus on achieving their goals and careers, willingness to stay in school, and overall academic performance. Program participants expressed high levels of satisfaction with their grade point averages, counseling services, improved test results, cultural enrichment, transferability, confidence, and overall program experiences in terms of their academic experiences. Students were much more likely to mention obstacles that were beyond their control, like a lack of facility space, when barriers to their success were being discussed. The findings of this study may add to the body of knowledge already available on student involvement in student support services. The results could be used to enhance the services offered and deliver much-needed, top-notch educational programming to students who are struggling academically. The findings might help us comprehend how student perceptions and experiences might affect future policies and the restructuring of other academic support programs based on student involvement. Additionally, this study may assist in analyzing and identifying the Student Support Services program's best practices, which could then be used as benchmarks in evaluations to measure program effectiveness.

Student support services also play an important role in the teaching and learning processes. Educational authorities should put forth a determined effort to provide and update student support services as part of their internal quality assurance strategy. In order to ascertain and investigate the effect of student support services on academic success at a historically black college, Cummings (2014) conducted a study. This study's theoretical underpinnings included the Austin input-environment-outcome model, Scholssberg's marginality theory, holistic theory, facilitation theory, and the theory of sensory simulation. A mixed method approach was used to quantify and explain triangulated data, which included the N-LSSI survey, archival data, and focus group interviews. Therefore, MANOVA was used in the study to analyze academic achievement data for SSS and Non-SSS students. This analysis also determined whether there were statistically significant differences between the SSS and Non-SSS student participant groups based on the means of the predictors. The qualitative data analysis program MAXQDA was used to arrange, rate, and interpret the qualitative data using open, axial, and selective coding. The results of the analysis showed that there were no appreciable differences in the GPAs of the two student groups. The Accuplacer scores for math, reading, and writing, however, varied significantly. However, retention differences between SSS and Non-SSS students were notable in 2011 and 2012, even though graduation data only showed significant differences in 2012. The results of the N-LSSI

survey revealed no significant distinction between SSS and Non-SSS satisfaction with The College, and focus group interviews with students showed that these satisfaction levels were nearly identical.

For teaching and learning to be effective, educational institutions should ensure that learners get quality support services. In order to better understand how learner support services are provided and how they affect students' performance in open and distance learning centers at the Institute of Adult Education, Maijo (2018) conducted a study. The study employed an exploratory research design. The 135 respondents who made up the sample size were selected using straightforward random and purposeful sampling techniques. Information compiled using questionnaire and interview techniques. Using descriptive statistical methods and the SPSS program, frequencies and percentages were obtained. The study's conclusions demonstrated how crucial learner support services are for students to succeed academically. Conclusion: If properly coordinated, learner support services are to students' academic success. It is concluded that, if coordinated well, learner support services could significantly improve students' academic performance and other learning opportunities. The study recommended that the institute create and implement a policy for learner support services and give students more control over their open and distance learning experiences.

Delivering learning material to learners even outside the classroom is important in students' learning. In a study, MöWES (2005) evaluated the student support services offered at the University of Namibia's northern campus from the viewpoint of the students. Data for the study was gathered using a questionnaire with open-ended questions and a literature review, which combined quantitative and qualitative methodologies. Adult distance education students value the availability of student support services, the study's findings indicate. Student support services related to starting their studies, such as orientation sessions about the services that are available and contact and communication with tutors, were highlighted in this study by students in particular. One of the findings of the study was that the establishment of an effective student support model to support distance learning depends critically on institutional policy and management's role. The following recommendations were made: The University's Centre for External Studies (CES) should routinely and periodically evaluate the studies of its distance education students in order to create, develop, and provide student support services that are tailored to each individual student's needs and expectations. Focusing on support services that assist in removing barriers is essential

if CES is to achieve its goal of expanding access to high-quality higher education. CES should provide tutors with adequate training so they are ready to handle the particular difficulties that open and distance learning present. To adequately prepare distance education students for the use of contemporary ICT, CES should develop and implement an appropriate Information and Communication Technology (ICT) course.

Incentive is important in the educational sector because it motivates the teaching and learning process. In a different study, Koller and Maras (2020) looked into the effect of incentives specifically on college students to see if they reacted to them differently than employees. It also took into account determining how much college students could be inspired to improve their performance on assignments. An online survey was used in the study. Participants in the bonus contract received an additional piece of candy for each correct response, whereas those in the penalty contract received the maximum of ten pieces of candy before the quiz began, and one piece of candy was subtracted from the pile for each incorrect response. The study's findings showed that the performance levels of participants in the bonus and penalty structures were identical. Students who preferred candy as payment had higher performance levels, but they didn't work on the assignments for longer periods of time. The majority of participants preferred candy as payment. This means that universities need to focus on the role of incentives in promoting diligence through merit-based systems.

Motivation in higher educational institutions can influenced learning. In an article, Herranz-Zarzoso and Sabater-Grande (2018) studied the effects of financial incentives on academic performance of students. Depending on the students' absolute or relative academic performance, two alternative payment mechanisms are implemented by two treatments in a randomized field experience. Microeconomics students were chosen, and they were divided into two groups based on whether or not they had previously failed the course. New students were told that their reward would depend on their wager and the actual grade received. Returning students' rewards were determined by taking into account the wager, the actual grade received, and their growth from prior semesters. While in the second treatment, two rankings (one for new students and another for returning students) were established, students in the first treatment were compensated using a piece rate system. In both treatments, the implemented incentives were effective to increase the

average of grades for both types of students but the piece rate mechanism was more powerful to motivate a higher number of students.

Hernandez-Julian (2010) in a study to determine the relationship between the offers of merit based scholarships and students' performance, posits that in the United States, twenty-one states offer merit scholarships that require students to maintain a minimum grade point average (GPA). Using a comprehensive administrative database from Clemson University, this study determines the relationship between the incentives offered by a South Carolina merit-based scholarship and students' academic performance. It argues that debating whether to keep or lose this scholarship leads to greater effort and, as a result, better grades. The study's conclusions show that, on a scale of one to four, the scholarship's incentives cause GPAs to increase by 101. Despite being conducted in the United States, this study emphasizes the value of merit-based scholarships in raising student output. It is pertinent to this study because it identifies the provision of scholarships as a tactic to boost students' academic performance in higher education.

Students' involvement in decision making in the university can have a positive impact on teaching and learning. Oni and Adetoro (2015) carried out a study to investigate the effectiveness of student involvement in decision making and university leadership in 12 universities in Nigeria. All of the faculties of the universities and students participated in descriptive survey for the study. Using a comprehensive administrative database from Clemson University, this study determines the relationship between the incentives offered by a South Carolina merit-based scholarship and students' academic performance. It argues that debating whether to keep or lose this scholarship leads to greater effort and, as a result, better grades. The study's conclusions show that, on a scale of one to four, the scholarship's incentives cause GPAs to increase by 101. This study handles just one important aspect of the current study.

Student leadership role in universities has an impact on their academic performance. Kashan, Shah and Ur-Rehman (2019) conducted a study to assess the impact of leadership on academic achievement at university level. The study's primary goals were to gather academic performance data and evaluate how student leadership affected their performance. The study's population was chosen at random from among all of the instructors and students from the social sciences programs at four universities. The pilot study was conducted at one university with a total population of 198 faculty members and 1969 students. The sample size was determined using proportional

distribution. Academic success was evaluated using the answers to a leadership competency questionnaire given to the students. The statistical significance of the data was examined using regression and percentage analysis. The study's findings indicate that the majority of social science students are leaders. The study also found that five student leadership factors were strongly correlated with one another and students' high and medium level academic achievement.

School leadership styles also play key roles in the school output, quality and students' academic performance. In public secondary schools in Homabay County, Kenya, Obama, Eunice, and Orodho (2016) conducted a study to determine the impact of principals' leadership styles on students' academic performance. Modified versions of Bossert's framework and Pitner's moderated affects model of successful schools served as the study's foundations. The study employed an ex-post facto research design. It combined stratified random sampling and purposive sampling techniques to obtain 216 secondary school teachers and 39 principals, producing 255 respondents. The study made use of a principal interviewing guide and a teacher survey. School administrators were found to have a range of leadership tenets, some of which are skewed toward the more autocratic and laissez-faire types while others point to fundamental democratic and transactional styles. Despite the use of a variety of leadership styles, it was clear that the majority of principals lacked the styles of leadership that support the creation of a supportive learning environment and the support of teachers required for effective teaching and anticipated increased students' academic achievement. A null hypothesis test found no statistically significant correlation between students' academic performance and the leadership styles of their principals. It was advised that school administrators strive to create a learning environment at their institution that is favorable to both teaching and learning.

The universities should ensure that they recruit lecturers commensurate to student population. This will mean that lecturers' workload would be adequate enough to allow for research and effective student follow-up as well job satisfaction. A study was conducted by Janib et al (2021) examined the connection between academic performance and job workload among Malaysian university academic staff. The study also makes an effort to discuss the two meditational paths that serve as the primary explanations for the relationship between job workload and academic performance before looking for empirical evidence for them. Career commitment and job satisfaction are examples of these paths. The study used cross-sectional data gathered from academic staff

members working in Malaysian Research Universities to test the three proposed hypotheses. Smart PLS was used to analyze the final sample of 191 valid and entire responses in order to test the hypotheses. The results showed that workload and academic staff productivity were negatively correlated. Job satisfaction also acts as a mediator in the relationship between workload and academic staff performance. The findings demonstrate how important job satisfaction is in reducing the negative effects of work load and academic staff productivity. The study has demonstrated that, in contrast to what we had anticipated, career commitment is not a mediating factor in the relationship between job demands and academic staff performance. This study improves our understanding of how job workload affects university academic staff performance by utilizing intervening variables.

Inclusion in educational institutions makes learners to belong and to feel protected and valued, therefore creating a conducive atmosphere for studies. In a study published in 2016, Mati, Gatumu, and Chandi sought to determine the effect of including students in important school decision-making processes. This study sought the opinions of students on the effects of their participation in decision-making on two different fronts, such as the choice of school to enroll in and the formulation of school rules and disciplinary measures for school rule violators, using information from twelve Kenyan public day secondary schools. It has been discovered that giving students a voice in important educational decisions increases their motivation, sense of ownership, and, consequently, their propensity to adhere to rules. This is an important internal quality assurance measure that if carefully adopted in all higher educational institutions, students will feel involved, engaged and valued. Consequently, teaching and learning will be promoted leading to improved student academic performance. So, this study investigates only one aspect of internal quality strategies meanwhile the current study, uses empirical methods to discuss other strategies.

Guidance and counselling is relevant in higher education and affects students' academic performance. Shaterloo and Mohammadyari (2011) argue that education has a vital role in the development and abilities of students. The goal of the study was to thoroughly examine the possibility that school - based guidance and counseling may help in students' academic performance. The study states that it is anticipated that students will realize their full potential as a result of their education and this can only happen if they receive ongoing counseling. High academic achievement and the possession of a range of specialized skills by students, not the least

of which involves academic-related matters, can be viewed as indicators of school success in carrying out educational tasks. In order to succeed academically, students should make use of the guidance and counseling services provided by their schools. Students struggle with a variety of issues. All students, not just those who require it, have their academic and developmental needs met by school counselors who collaborate with them, students, parents, teachers, and the community. Every student receives counseling at school to help them build skills in academic achievement, personal and social development, and career planning. Therefore, counseling continues to be a key factor in enhancing student learning at all levels and should be used as a key strategy for development.

Again, McKenzie et al (2015) in a study examined the effectiveness of university counselling for students with academic issues. The purpose of the study was to assess whether there had been a reliable and clinically significant change in the academic problems that students self-reported. Although it is believed that academic demands are stressful for college students, the article claims that little is known about the degree to which those who seek counseling services struggle with academic issues and the efficacy of counseling for them. The study found that reliable change occurs when a change in the outcome being measured is not attributable to error, and clinically significant change occurs when a person moves from a clinical population to a healthy population after an intervention, in the case of counseling. To establish levels of clinically significant change and reliable change, pre-existing data from 129 university students who had used a student counseling service were analyzed. Based on Core-OM total scores, self- reported effects of counseling on academic issues, demographic factors, and psychological status before and after counseling, these data compared the two states. The findings showed that 117 students (or 92%) overall reported having some kind of academic problem. For 67% of the students who reported academic difficulties, counseling produced a dependable change, and for 40% of them, a clinically significant change. The study's findings suggest that many students will still experience issues in these areas, even if they are not the main cause of referral to counseling services for students. However, it has been demonstrated that a significant portion of those who are struggling with these additional issues change for the better as a result of counseling.

In another study by Bobga (2016) to appraise the effective application of guidance and counselling in Cameroon state universities, argue that effective guidance and counselling programs in

Cameroon state universities was aimed at assisting students harmonize their abilities, interests and values and thereby develop their full potential. In order to ascertain how guidance and counseling programs and services affect Cameroon's state universities and how they enhance students' academic performance there, the paper set out to investigate these issues. The students' self-image would be enhanced, which would help them perform better academically. Students in higher education in Cameroon display a variety of problems, including subpar academic performance and low self-esteem that cause them to openly consume alcohol, skip class, steal, engage in sexual misconduct, and attempt suicide. These issues persist despite the fact that these universities offer guidance and counseling services. The concept of guidance and counseling services in universities is explored in this paper. The fact that students in Cameroon's universities and secondary schools continue to engage in anti-social behaviours, they cheat in examinations and engage in pre-marital sex despite the constant allocation of counselors to these institutions. All these led to the establishment of an empirical gap. The current debate centers on how guidance and counselors affect students. What challenges confront these counselors, and how might they be lessened? The theories of social learning and person-centered learning served as the basis for this study. The client and the counselor are the two individuals who are the focus of this interaction, which is strongly emphasized by the Person-Centered Theory. The social learning theory, on the other hand, asserts that children learn behavior through social interaction, specifically through observing and imitating what other community members do. The researcher advises that all counselors at Cameroon University receive in-depth instruction on the value of fully supporting guidance and counseling programs at their institutions. There is also need to work to change the negative attitude towards guidance and counselling held by some students and parents.

All forms of discrimination should be discouraged in all educational institution to foster the teaching and learning process. Jackson, Harvey, and Sherman (2020) identify the effect on academic performance in their article on discrimination and its effects in higher education. The role of discriminatory experiences in students' confidence in their capacity to persist through graduation was examined using hierarchical multiple regression analyses on data from a healthy mind study, controlling for age, extracurricular activity participation, housing, years in their degree program, and sense of belonging. Whites, Blacks, Asians, and Latinos all make up the sample, along with women. A final hierarchical multiple regression with covariates and discrimination revealed an overall model that explained 15.55 percent of the total variance of confidence. The

variance in students' confidence in their capacity to persevere is statistically significantly explained by the frequency of discriminatory experiences. As a result, more needs to be done to lessen discriminatory experiences among students. This study suggests a first step that organizations can take to better serve and keep their students. This means that a student's confidence and, consequently, their ability to study are greatly influenced by the absence of discrimination in higher education.

Wang et al (2004), in another article to investigate the influence of halls of residence in an institution on the male and female undergraduate students. Data was gathered using a survey design and a questionnaire. The study employed a regression model and factor analysis. Students who live on campus exhibit higher levels of faculty-student interaction and peer support, better academic and social integration, greater satisfaction and commitment, and higher college retention than those who live off campus. The study's main finding is that, whether they are male or female, students who live on campus tend to focus more on their studies than those who live off campus, which tends to improve their academic performance. This is true because cohabiting with peers fosters a spirit of compensation and boosts interactions in the classroom. Again, living in a residence hall operated by a university lessens the stress associated with paying rent and bills, which is a significant factor that interferes with a quiet study environment.

Vickerson (2003), explored the impact of place of residence on the academic achievement and retention of full time, first time in college students at the urban, public universities in the southeast. To see if there were any differences between the three subject groups in terms of retention into the second year of study and the state of freshmen English grades in terms of grade point average, the three subject groups were compared. Commuter students, residents of conventional residence halls, and residents of residential learning communities were the three subject groups that were contrasted. Age, gender, and ethnicity demographic characteristics as well as prior academic performance as measured by high school grade point average were used to match the subject groups. In two different analyses of covariance (ANCOVA) procedures, the Scholastic Aptitude Test (SAT) scores were used as a covariate to test for group differences in academic achievement. Retention into the second year of study was looked at using a binary logistic regression to compare the expected and actual re-enrolment frequencies. The findings indicated that there were no differences in academic performance between the subject groups based on the mean freshman

grade point average. Comparing the means of the groups' Freshman English I grades led to statistically significant results. In terms of mean course grade, the residential learning community group outperformed the traditional and commuter groups. There were no distinctions between the groups in terms of retention into the second year of study. Using the data gathered as a result of the analyses, conclusions, implications for future research, and recommendations for administrative consideration are discussed.

Living conditions of learners can influence their academic performance. Mbandlwa (2020) in a dissertation sought to compare the academic performance of students living in the halls of residence and those staying in their homes. He argues that meeting the entrance requirements being accepted at the university have always been the main concerns of applicants to universities, but that once students area accepted, another worry comes up and that is where to live. The university welcomes students from all over without regard to whether they have housing or not, and the same is true of the lecturers who do not worry about the accommodations for their students. All students are exposed to the same material and lecturing style. Despite this, academic institutions expect all students, regardless of their living conditions to perform well. The study employed a secondary research methodology to gain access to the results and statistics of students from various universities in South Africa. The research found that while the type of housing where the students live does play a role, the biggest factor is the personal motivation of each student. The college made provisions so that students would have access to all of the tools and materials they would need for their studies, including wifi.

Raman et al (2011) argues that university students' satisfaction with the universities food service and establish the benefits of that satisfaction to the institution especially the willingness and likelihood of recommending the institution to prospective students and parents. In universities, there is a connection between food services and student satisfaction. To collect data, 200 students were given questionnaires to complete. The results demonstrated that every suggested independent variable is significant and positively correlated to the dependent variables. The crucial element that has the biggest impact on a student's satisfaction with cafeteria service is the food's quality. The gender of the student has no discernible relationship to their satisfaction. This is a crucial university service that has an impact on how happy students are with the school, and it will undoubtedly increase student output.

Food service plays an important role in higher education (Tiani et al, 2014). Food services in Higher Education is seen to be an important requirement that can have an impact on students' academic performance. In addition to a quantitative survey, this study used business anthropological techniques to examine the effectiveness of food service operations at a Chinese university. Participant observation and in-depth interviews were two of these methods. Investigated were the effects of poor food service on students' learning, satisfaction, and health. Inadequate food service operations were also identified by the research, and recommendations for improvement were made. The conclusion of this paper would strongly encourage improvements in university dining services by urging the Chinese government to take food service quality into account when assessing the performance of universities.

In another dimension, Zotorvie (2017), investigated the critical factors that influenced students' choice of residential accommodation facilities as well as the effects of accommodation type of academic performance in Ho Technical University, Ghana. Through a questionnaire survey, information was gathered from carefully chosen respondents. Version 20 of the Statistical Package for Social Science (SPSS) was used to analyze the data. The research hypotheses were tested using the Chi square test and descriptive statistics, and the key factors that significantly affected students' decision to live in residential accommodations were identified. The study discovered that proximity to lecture halls, spacious, well-ventilated rooms, a calm and peaceful environment, the availability of study space, the cost of lodging, and other factors were the main factors influencing students' choice of residential accommodations. There was no discernible impact of accommodation type on students' academic performance, according to the Chi-square analysis. This study focuses only on the effects of accommodation, one learning resource on students' academic performance and uses a different research design while the current study duels on other student learning resources and other key areas of university function on students' academic performance.

According to Ciobanu (2013), the theme of student services has been generally neglected in terms of European policy debates. However, the institutions should consider the fact that students require more guidance and counseling in order to find their specific academic paths in a more adaptable educational environment when redesigning the curriculum that puts students at the center. All facets of university life, including student services, must rise to these new challenges

in the context of the multicultural academic diversity that globalization promotes. With a population that is continually expanding and diversifying, many aspects of student life, whether on an academic, social, or cultural level, become more difficult to comprehend and manage (Audin and Davy, 2004). In order to give the required assistance for academic activity and promote personal, social, cultural and cognitive development, it is necessary to develop effective student services that are centered on its needs. The way in which policies are developed, the content of the curriculum and services, the degree of knowledge about student development, and the way in which the environment shapes students' behavior all have an impact on the role that these student services play. Supporting and enhancing the student experience (academic, social, welfare and support) from first contact through to becoming alumni is critical to success in higher education today for both the student and the institution.

University Pedagogic (Teaching and Learning) Practices

Internal quality assurance strategies should be put in place to monitor the teaching and learning process. For example, Mukter (2015) carried out a study aimed at examining the role of quality assurance in improving quality instructions and academic achievement of pupils in primary schools in Sokoto metropolis. Data were gathered for the study using the survey method and a descriptive research design. 190 respondents were sampled using the stratified random sampling method. Simple frequency and percentage of the sampled responses are used to refer to the data analysis. An authority on primary education administration, planning, and research methodology validated the study. In order to assess its internal consistency (reliability), the pilot study method was used. The study's conclusions showed that quality assurance helps to ensure a positive and cordial relationship between effective instruction and students' academic achievement. It also highlighted some issues that quality assurance faces, including teacher, school administrator and quality assurance officer corruption, a lack of instructional materials, a lack of qualified quality assurance officers, and teachers, among others. Finally, suggestions were made at the conclusion of these studies on how to deal with the difficulties in ensuring quality assurance. For better improvement, the educational system should have a zero-tolerance (anti-corruption agency). Additionally, there should be enough instructional materials, more qualified quality assurance officers and teachers deployed in primary schools, and encouragement for more people to take refresher courses. This study is relevant to the present study in that it examines the role of quality

assurance in instruction and academic achievement of pupils. It also uses the descriptive design and a questionnaire to collect data. However, while the study examines quality assurance in primary school and limits it to instruction, the present study expands and examines internal quality assurance in all fields of university functioning.

Teaching methods are essential in student learning. According to Munyaradzi (2013), a study was conducted to look into how different teaching strategies affected students' academic performance. The Department of Economic and Business Sciences at the College provided a sample of 109 undergraduate participants for the study. The results of the internal class test that the lecturer had created were used to calculate the students' assessment test scores for the inferential statistics course. Using the General Linear Model-based univariate ANOVA method, the different effects of the three teaching methods on academic performance were examined. The $F(2, 106)$ statistic ($= 10.125$; $p < 0.05$) and the Tukey HSD post-hoc results indicate significant differences on the effectiveness of the three teaching methods. The results of the mean scores show that the student-centered method was the most effective teaching strategy, followed by the teacher-student interactive method, and the teacher-centered approach was the least successful strategy.

For teaching to be effective, teachers must engage in constant research for if a teacher stops reading, he or she should stop teaching. In a study published in 2014, Uchendu et al. investigated how lecturers in universities in Nigeria's Cross River State perceived the value of research activities for the creation of new knowledge. There were two proposed research questions and hypotheses. Data was gathered and analyzed using a self-made questionnaire and a stratified random sampling technique. The findings showed a strong correlation between knowledge production and how lecturers perceive research activities. The type of university has no discernible impact on how lecturers view research as a means of knowledge production. It was suggested that government should fund university research activities to support knowledge production that returns them in the form of making contributions to the development of the economy, political and social systems.

Pedagogic practices affect students experience and contribute to their academic performance. In order to examine the pedagogical practices and students' experiences in Eritrean Higher Education Institutions, Tsegay, Zegergish, and Ashraf (2018) conducted a study. The study made use of semi-structured interviews and a document review. According to the study, pedagogical practices are

influenced by the teaching and learning environment as well as the instructors' pedagogical knowledge and perceptions. The pedagogical strategies used by instructors have an impact on students' educational experiences as well as their socioeconomic and political perspectives. Despite its small size, the study provides a more thorough explanation of the connections between instructors' pedagogical practices and students' experiences. Other countries, especially developing ones with comparable conditions, can use it as well. According to the study, knowledgeable instructors use interactive pedagogy to link theory and practice even in large classes. Hence, instructors need to be trained, well equipped and motivated to improve their teaching skills and attitudes.

Wen-Hwa Ko1 and Feng-Ming Chung (2014), in a study examined the effect of the teaching quality of culinary arts teachers and student learning satisfaction on the academic performance of hospitality of hospitality students. This study surveys students in the hospitality programs of Taiwanese universities. The legitimacy of the questionnaires received was overall 82%. The results of the research show that there is a significant positive correlation between teachers' teaching quality and both their students' learning satisfaction and academic performance. Students' satisfaction with their learning acts as a mediator in the relationship between teachers' effectiveness as teachers and students' academic performance. This study is related in that it discusses the importance of quality teaching and academic performance. However, the present discussion focuses on the promotion of quality teaching so as to enhance academic performance.

One quality assurance strategy has to do with ensuring effective teaching methods to all learners including those strategies that can promote the teaching of students with disabilities. In order to determine the effect of teaching strategies on the academic performance of students with hearing impairment in a Kenyan school, Kathare (2012) conducted a study. The study's foundation was Burhus Fredric Skinner's theory of learning motivation. The researcher was able to gather, summarize, present, and interpret the data in order to provide clarification thanks to the descriptive survey used in this study. The study's target population included head teachers, math instructors for students with hearing impairments, and quality control and standard officers in the Igembe District. A sample of 53% of the accessible population was used in this study. To gather data, the researcher used three (3) different types of research instruments: questionnaires, interviewing protocols, and observation checklists. In order to establish reliability, the researcher used the test-

retest method during the piloting phase. This study was conducted in a unique unit of the Tigania District, which will be purposively sampled to guarantee the accuracy of the research instruments. They were created after discussion with my supervisors and other postgraduate students. The field data was gathered, coded, and analyzed using tables, charts, frequencies, percentages, and texts. Tables, charts, graphs, frequencies, percentages, and texts were used to collect, code, and analyze the field data. According to the study, using a variety of teaching methods improves the academic performance of students with hearing impairment in mathematics. The study also found that total communication and sign language are teachers' main modes of instruction when teaching math to students with hearing impairments. Additionally, it was discovered that students who have hearing impairments who attend special schools and units in the Igembe District perform better academically in mathematics when there is an effective teacher population and a supportive student body. Additionally, the study found that teachers employ interactive teacher-learner teaching/learning techniques like personalized instruction and interactive learner-learner teaching/learning strategies like peer tutoring to address specific mathematic difficulties in students.

In a study on teaching strategies and students' academic achievement in a few public schools in Rwanda, Obilan (2019) makes the case that there are numerous factors that affect students' academic achievement and that teaching strategies are a crucial factor in this direction. The study adopted the descriptive survey methodology, using a questionnaire and an interview schedule to collect data. The goals of the study were taken into account when analyzing and interpreting the data. Descriptive statistics were used to analyze and interpret the objectives. The relationship between the two variables was then examined using the Spearman correlation coefficient. The results show a relationship between students' academic performance and interactive teaching strategies. This indicates that a significant correlation between teaching strategies and students' academic performance was found by the study. The study then made the recommendation that educational authorities periodically ask students which teaching strategies work best for them. If this is done, student learning will be enhanced, leading to an improvement in students' academic performance. This study is relevant though it handles only one aspect of the present study.

Quality assurance is geared towards improving quality instructions is schools so as to guarantee the academic achievement of learners. Dansokoto (2015) carried out a study aimed at examining

the role of quality assurance in improving quality instructions and academic achievement of pupils in primary school in Sokoto, Nigeria. The study, which employed a descriptive research design to gather data, involved questionnaire responses from teachers, headmasters, and quality assurance officers from five schools. The data was examined using simple frequencies and percentages. The system's internal coherence was evaluated using the pilot study methodology. The findings indicated that good instruction and students' academic achievement have a positive and cordial relationship that is enhanced and helped by quality assurance. It also revealed some difficulties that quality assurance faces, including teacher and school administrator corruption, a lack of instructional materials, and a shortage of qualified quality assurance personnel. The researcher was influenced by the findings to offer suggestions for overcoming the difficulties in ensuring quality assurance. For better improvement, the educational system should have a zero-tolerance (anti-corruption agency). Additionally, sufficient instructional materials should be made available, more qualified quality assurance officers and teachers should be placed in primary schools, and students should be encouraged to enroll in more refresher courses (seminars, workshops, and conferences).

Pedagogic practices are the centre and key activities of any institution. A study on the effects of authentic pedagogical practices on students' academic performance and retention power was conducted in 2016 by Hussain, Ahmad, and Khan. They assert that conventional lecture, discussion, and assignment-based pedagogical practices do, in fact, contribute to students' capacity to absorb knowledge. The goal of the current study was to determine which pedagogical approaches-traditional or authentic-were more successful at improving students' academic performance and retention. The objective was to evaluate the effects of conventional and genuine pedagogical approaches on students' academic performance and retention. The study's methodology included pre- and post-tests, and the students in the experimental group were exposed to real pedagogical strategies while those in the control group received conventional techniques. After collecting the data many times and analysing it, the results revealed that the students in the experimental group the students performed higher on the post-test than students of the control group.

Teachers’ teaching methods has an effect on students’ academic performance (Ganyanpfu, 2013). The study examined the differential effectiveness of teaching methods on academic performance and used data collected and analyzed from a sample of 109 undergraduate students from the

college's department of economics and business sciences. It discovered significant differences between the three teaching methods. The results of the mean scores demonstrate that the teacher-centered strategy was the least successful, while the student-centered strategy was the most successful.

Again, Suarez, Cezar and Nunez (2020) argued that pedagogical practices have an impact on students' academic performance in mathematical processes. The study investigated the relationship between students' perceptions of teachers' mathematical techniques and their academic performance. Following data analysis, the conclusions show that the academic performance in that subject area is influenced by the pedagogical practices on mathematical procedures used by the teachers from the perspective of the students. Data were gathered for the study using a structured questionnaire.

Instructional strategies can affect students' academic performance (Onweh and Akpan , 2014) . Research on the effects of instructional strategies on students' academic performance in electrical installation colleges in Akwa Ibom State was published in the International Journal of Educational Administration and Policy Studies, under the title Instructional skills for structuring appropriate learning experiences for students. It claims that instructional skills are the most specialized subset of teaching behaviors. According to the findings, there were notable differences between how well students in Electrical Installation performed academically when they were taught using discussion and lecture strategies, as well as demonstration and inquiry strategies. A number of techniques, including the Electrical installation achievement test, were used to generate the data. Then, it was suggested that, in order to enhance teaching and learning, a variety of instructional strategies be used.

In the same direction, Klaveren (2011) argues that the lecturing style of teaching affects students' academic performance. The study further argues that Dutch teacher favour a more individualized approach over giving lectures in front of the class because it is thought that doing so improves student performance, It also notes that a more personalized approach is time-consuming and might eliminate the benefits of delivering lectures in front of the class. The study investigates whether the cognitive performance of Dutch students is influenced by the amount of time teachers spend lecturing. According to the study, there is no connection between students' academic performance and outdated teaching methods.

For teaching to be effective, it should be innovative. Yawman and Kubi (2008) carried out a study on innovative teaching strategies and students' achievement with the main reason to investigate how innovative teaching approaches affect the performance of students learning science. In a Thai school, two classes totaling 50 students were purposefully chosen; one served as the control group and the other as the experimental group for this study. The experimental group received instruction using a creative teaching strategy, while the control group received instruction using conventional methods. This study modified the pre-test and post-test technique. According to the study, students who received instruction using creative teaching strategies performed significantly better on the post-test than their counterparts who received instruction using traditional teaching strategies.

Teachers teaching experience has an effect on the overall achievement of students. To determine whether years of teaching experience an impact has on students' overall performance on the communication arts and mathematics sections of the Missouri Assessment Program, Dial (2008) conducted a study. It also examined whether the educational background of a teacher had any impact on the overall performance of the students enrolled in the same programs. In order to ascertain whether teacher years of experience or degree level had an effect on student achievement, the researcher used data from the communication arts and mathematics sections of the Missouri Assessment Program exam from the 2005–06 and 2006–07 school years. This was done using descriptive statistics and factorial ANOVA. Uncertain findings revealed that teacher preparation alone had no bearing on student achievement. According to the findings, both years of experience and the interaction between years of experience and degree level had an impact on students' performance in both mathematics and communication arts. These findings offer a solid basis for future research, in which this particular study could be continued using test score data from upcoming exams. It could also be made state-wide by utilizing information from districts all over the state. Last but not least, this study could be modified to add additional variables like the number of years of experience teaching a tested subject or grade level as well as a particular field of study.

Teachers' variables influence students 'academic performance. Ujulu et al. (2019) in a study investigated the influence of teacher's variable on student's academic achievements in secondary schools in Jalingo Local Government arrear of Taraba state in Nigeria. In a study published in 2019, Ujulu et al. examined the impact of teacher variables on students' academic progress in secondary schools in Taraba state, Nigeria's Jalingo Local Government Area. The methodology

used for this study is regarded as qualitative because both primary and secondary methods of data collection were utilized. Due to the use of a multi-stage sampling procedure, it also contains the best statistical tool for analysis. The study's guiding principles were four research questions, and correlation research methodology was used. Overall, 325 questionnaires were distributed; 300 of them were discovered, and 25 of them were empty. The presentation, analysis, and interpretation of the data revealed that the majority of secondary school teachers in Jalingo were credentialed educators. However, their instruction was ineffective. Therefore, it was advised that the government encourage experienced teachers to remain in their positions by increasing incentives and perks. The promotional prospect of the teachers should also be improved. The State Ministry of Education should make more efforts in the inspection and monitoring of schools to ensure that teachers stay on the jobs.

In the same direction, Adeyemi, (2008) supports the view that teachers' teaching experience has an effect on students' learning outcomes in secondary schools. All 257 secondary schools in the state that registered students for the Senior Secondary Certificate (SSC) examinations in 2003 made up the study's population, which used a correlational survey. 180 schools were included in the sample through the use of stratified random sampling. An inventory and a semi-structured interview schedule were the instruments used to collect data for the study. The gathered data was examined using the chi square test, correction analysis, and t test. The semi-structured interview was attended by the chosen principals and education officials. We looked at their answers using content analysis. Based on the results of the SSC exams, it was found that teachers' teaching experience had a significant impact on the learning outcomes of their students. Again, it demonstrated that in terms of student achievement, schools with more teachers with five years or more of experience in the classroom outperformed those with more teachers with less experience. It was suggested, based on the findings that the government offer incentives like better promotional prospects, a better welfare package, and better working conditions to encourage experienced teachers to stay on the job. This study is similar to the current study in that it discusses teacher experience and provision of incentive as correlates to students' academic performance.

Lecturers' Competences also have an influence on students' academic Performance (Muzenda, 2013). The effects of lecturers' qualifications on higher education and training students' academic performance are discussed. Using simple random sampling methods, a sample of 115 students was

selected for the study. A structured questionnaire was used to collect information on the extent to which different variables measuring lecturers' competences affect students' academic performance. The data collected using the survey instrument was processed and analyzed using the SPSS statistical package. Four hypotheses were investigated using stepwise regression. The findings show that lecturers' attendance, subject expertise, teaching abilities, and attitude all have a significant positive impact on students' academic performance.

In a similar study on pedagogical strategies and academic achievement of students in public universities in Uganda, Ludgo, Mugimu and Mugagga (2019) analysed the relationship between pedagogical strategies and academic achievement of students in public universities in Uganda. The study specifically looked at how student academic achievement and teacher-centered, student-centered, and student-related pedagogical strategies are related. The study, which had a correlational design and a sample size of 383, used a questionnaire to collect data. While Cronbach alpha was calculated, confirmatory factor analysis was used to ensure quality control. Both descriptive and inferential statistics were used to analyze the data. According to the findings of the regression analysis, the student-centered strategy, as opposed to the teacher-centered and teacher-student interaction strategies, had a favorable and significant impact on students' academic achievement. This suggests that the student-centered pedagogic strategy, as opposed to the teacher-centered pedagogic strategy, is essential for student academic success. Accordingly, the study advises lecturers at universities to prioritize student-centered pedagogy over less effective methods when instructing students.

There is a strong relationship between pedagogic processes and the academic performance of pupils in public primary schools (Yasin, 2021). The term ‘pedagogic’ was used to refer to all situations and circumstances that have an impact on students’ physical, intellectual and educational well-being. It discussed classroom management techniques, teaching strategies, and assessment strategies. The study was conducted as a result of students' declining performance on public exams, where the percentage of failure increased to 16% between 2014 and 2018. Using a cross-sectional survey design on a sample of 160 teachers, the study discovered that pedagogical practices have a significant impact on students' academic performance in public primary schools in the Hargeisa District. Therefore, it was advised that educational authorities enhance training programs to improve teachers' output and enhance teacher education.

The teacher and teaching effects have a strong correlation with students' academic performance (Blazar, 2016). In the study, teachers' attitudes and behaviours are seen as key components of the teacher and teaching. According to the research, teachers have a significant influence on their students' academic success and long term success. The study collected information from teachers in four urban school districts and examined how well students performed in math as well as their self-reported self-efficacy, happiness in class, and classroom behavior. The study also calculated the connection between two observational instruments' capture of teaching practice domains and student outcomes. The study found that in addition to their impact on students' academic performance, teachers also have an impact on their behavior and attitudes. Additionally, it demonstrated that instructional strategies predict student outcomes.

Pedagogical interaction and learning performance as determinants of academic achievement. Again, Abrantes, 2015). The study looked at how learning performance, student-student interactions, and teacher competencies affected high school students academic success, both directly and indirectly. A representative sample of secondary school students in Poland from the year 1986 participated in a quantitative study. According to the structural model's findings, perceived teacher competences have a positive and significant impact on student-student interactions and learning performances, which in turn have a positive and significant impact on students' academic achievement..

The employability of graduates from higher education can be improved by curriculum quality assurance (Tendongmoh, 2019). The study's main goal was to improve curriculum quality assurance because it is a requirement for higher education graduates to be employable. He contends that despite massive yearly expenditures by the government and individuals, graduates hardly ever find employment or even manage to start their own businesses. He believes that this outcome has driven young people into theft, cybercrime, migration, hopelessness, disillusionment, and misery. University of Yaoundé 1 graduates made up the study population. The study employed a homogenous sampling strategy and a sample of 203 students and 23 employers. Data collection involved the use of questionnaires. Cross tabulation analysis was used to analyze the data through the SPSS statistical tool. The main conclusions show that improving the quality of the curriculum increases graduates' employability, that employers are never consulted when developing the curriculum, and that the majority of people are unhappy with the current curriculum. The study

makes the following recommendations: modify the current curriculum; prioritize the socio-political and economic state of our society; and involve economic operators in the project. It concludes that curriculum quality improvement is the driving force behind the graduates' knowledge, skills, competences, and abilities that support employability and promote economic growth.

Garwe (2018) examined the creative policies, practices, methods, systems and tools that have been used in Zimbabwe Council of Higher Education to assure quality in the constantly changing higher education environment. The paper's objective was to inform nations that are still creating quality assurance frameworks. In order to foster an environment that is conducive to creativity and innovation, the author emphasized the significance of motivation. The need to uphold and raise standards in a time of evolving teaching and learning paradigms necessitates that quality assurance organizations adopt cutting-edge technologies that can weed out the troublemakers in the educational field. He comes to the conclusion that in order to ensure and assure improvement of higher education provision, this institutional (internal) quality assurance is balanced with strict external quality assurance practices. The study provides guidelines for developing frameworks for quality assurance that are helpful in creating both internal and external quality assurance cells that can oversee quality in different countries.

Quality assurance has a relationship with students' academic performance (Saeed, 2018). A study that examined the role of quality control in raising academic performance at the university under investigation discovered a significant relationship between the two key variables. The study focused on the areas of teaching, learning, productivity, quality, and ranking in research. The study's findings show that the Ishik University's teaching, learning, and research processes have fundamentally changed and improved as a result of the application of the quality assurance process, raising the university's ranking. A survey questionnaire and interviews with the teaching staff were used in the study, which used a qualitative content analysis. Instead of student performance, the study correlates quality assurance with the academic performance of teaching staff. Utilizing three waves of quality assurance indicators for high quality education, they focused their discussion on the necessity of educational transformation. Since they are based on different paradigms and theories of educational quality and school effectiveness, the various waves give rise to various strategies and approaches for ensuring the quality of education. The paper goes on to say that in

order to be relevant to both the new school functions of the twenty-first century as well as the new paradigm shift in education regarding contextualized multiple intelligences (CMI), globalization, localization, and individualization, the third wave of school transformation should focus heavily on future quality assurance indicators. Due to the paradigm shift, a new quality assurance indicator is added to the list that is completely different in terms of value added and value created indicators. While improving goal relevance and stakeholder satisfaction with the quality of education services are the main drivers of value creation, internal process improvement can also increase value addition. The authors continue by arguing that ongoing institutional development is necessary for complete quality assurance in the secondary school system and for the quality control of the new secondary school curriculum that puts a focus on entrepreneurship education.

Atindogbe (2018) posits that data sharing and reuse is seen as a fundamental step towards sustainable quality assurance (QA) in research and as a result, an essential component of research management in higher education. H does this by discussing the research management in Cameroon higher education, data sharing and reuse as an asset to quality assurance. This chapter examines the concept of DS&R in Cameroon research, links it to the concept of QA, and demonstrates why DS&R must become a common practice across the entire spectrum of research in Cameroon. This study focuses on research quality assurance, which is important to the operation of higher education because it produces knowledge and promotes growth in all spheres of life. However, the study did not cover the effects of a lack of research in higher education.

According to Serrano-Aguilera et al. (2021), peer review can be crucial to improving students' academic performance. The primary goal of the Spanish university system, according to the study, is to implement the active paradigm in the context of Spain's integration into the European Higher Education Area. Peer review, a method for collaborative learning in which students assess each other's work and provide feedback, is therefore the primary focus of the study. Peer review is a practice that has been successfully investigated in the literature. In fact, many authors advocate for improving the structure and operation of self- and peer review, which was our primary goal. The study, which is based on empirical research, examines how peer review assessment is used in various undergraduate and graduate courses in higher education. Peer review techniques are used in six courses from various studies in this way to encourage student learning and foster the development of cross-disciplinary abilities like critical thinking autonomy, and responsibility.

Based on these experiences, a thorough analysis of the data is carried out, demonstrating that the peer review methodology, when used correctly, produces reliable reviews and boosts student performance. This study in related in that it presents a strategy that enhances academic performance.

Peer review is very essential in the teaching and learning process especially in higher education (Li Teoh, Ming and Khan, 2016). In a study on peer review of teaching (PRT), one of the many evaluation techniques used to gauge the effectiveness of teaching was examined. Therefore, the study's goal was to summarize faculty perceptions of obstacles and attitudes toward PRT. In order to do this, a thorough search across many data bases was carried out, and 26 studies were found to be suitable for data extraction. Due to the fact that all of the data were only presented in narrative form, no statistical test was performed to determine the significance, difference, or association between variables. The value of including teaching specialists in the PRT process, the PRT's content, the standard of feedback, related objectives, and faculty perceptions of PRT's obstacles were all identified through a thematic analysis. It is impossible to overstate the importance of peer review in the teaching and learning process for successful outcomes; consequently, common barriers to peer review must be taken into account for effective peer review practices. While this study presents, the barriers, the present study discusses on how quality review practices can be applied to ensure students' academic performance.

The role of peer review in the advancement of teaching in Australia was examined in another article be Woodman and Parappilly (2019). Peer review of teaching (PRT) may have an impact on how well teaching practice is shaped during the formative years of academic study depending on the frequency of evaluations and the teaching experience of the peers. In the study, two junior Australian university lecturers who had never participated in peer review and held teaching positions at the university completed a one-week academic development program that was required of all new academic staff members before conducting a single PRT on one another. The recording of tier experiences served as input for the creation of a teaching philosophy. The study described the observed effects of the PRT process on their instructional approaches and the potential constraints brought about by their lack of background in formative PRT and instruction. Despite their relative inexperience, both academics felt that their initial PRT had sped up changes to their knowledge-transfer strategies, which were primarily teacher-focused. Without the

assistance of more seasoned teaching faculty, the case study offers qualitative proof that PRT programs can successfully influence teaching practice. It suggests that academic developers emphasize for early-career PRT participants the value of fostering collegiality and the scholarship of teaching and learning. This raises the significance of peer review as a component of teacher evaluation and development, which is pertinent to the current study. Though carried out in Australia, this method can be used in the Cameroon setting. However, the present study considers peer review just as one strategy in promoting student learning and achievement.

Students' evaluation of lecturer and even the course is important in ensuring students' learning and eventual academic performance (Bemile, Osborne and Ofosu, 2018). It has been a long standing practice in many academic institutions all over the world for students to evaluate courses and lecturers in higher education institutions. Because of this, the practice demonstrates the need for a lecturer to be well-prepared before giving a lecture and to always conduct themselves professionally, even when speaking with students outside of the lecture hall. The study took a qualitative approach to gather opinions about the exercise's challenges and potential applications from the staff of the university's quality assurance unit. The study concluded that student evaluation of courses and lecturers is a constructive exercise that helps lecturers become better teachers rather than a witch hunt. Another benefit is that it allows the institution know students' perceptions in terms of the facilities that are at the disposal of students which act as learning aids. This study discusses only one method of improvement in university while the current study goes beyond.

In keeping with the aforementioned, Sok-Foon, Sze –Yin and Yin –Fah (2012) argue that evaluating lecturers' performance at the end of the semester can enhance teaching and learning. The purpose of the study was to use a questionnaire to determine the causes and predictors of lecturer performance among undergraduates at a private university in Malaysia. Universities and colleges routinely assess lecturers' performance at the end of each semester, the study claims. The evaluation results can be used to pinpoint potential areas where the lecturer needs to improve. An overall sample size of 223 respondents was obtained through multistage sampling. The findings of this study demonstrated a positive correlation between overall lecturer performance and the characteristics of the lecturer and tutor, the subject characteristics, the studentship and the learning resources and facilities. To identify the predictors of overall lecturer performance among the

students, stepwise hierarchical regression was used. According to the final results, 61.9% of the variation in students' overall lecturer performance could be attributed to factors including lecturer and student characteristics, subject characteristics, and learning resources and facilities. Knowing the predictors of overall lecturer performance would help the lecturer and university identify the specific areas for improving the performance of the lecturer.

Students' perceptions of teaching and learning practices have an influence on students' class attendance and engagement with teaching and learning processes and is perceived to be a critical element for academic performance (Mukorera and Nyatanga, 2017). To examine how first and second year students' perceived the 12 teaching and learning strategies used in economics models, the study used a principal component analysis. The findings demonstrated that lecturer consultation, weekly small-group tutorials, and revision classes were viewed as the most helpful practices for first-year students' academic performance. The study's main finding was that first-year students tend to be solitary learners and prefer teaching and learning methods that involve one-on-one interaction with the instructor. Second-year students, on the other hand, tend to be more social learners and favor group-based teaching and learning methods. Teaching is the main role of an academic institution and without it there will be no learning, therefore as the study posits, effort must be made to engage in best practice.

In contrast to conventional didactic lecturing methods, micro teaching techniques use a variety of interactive and multimodal strategies to create a more engaging classroom environment (Mahajan and Kaushal, 2019). This is an essential strategy for quality assurance, and it must be created to support innovative pedagogical approaches that can affect students' academic performance. 70 B.SC. Nursing students from the foundational and advanced levels participated in a cross-sectional interventional study. 70 students' performance was evaluated over the course of five lectures, each of which was divided into two sessions. This evaluation examined the effects of two different teaching strategies. Only a power point presentation was used to deliver the lecture in the first session. The lecture was delivered in the second session using a variety of interactive teaching strategies. Students' opinions on the caliber of the lectures were solicited after five lectures. The quantitative analysis revealed that, across all five sessions, the students' mean prottest scores were significantly higher than their pretest scores. The study's qualitative evaluation, which was based on student feedback, indicated that better knowledge attainment and higher levels of satisfaction

were to be expected. The study recommends that interactive learning be incorporated into regular classroom settings in order to improve understanding.

In another study on innovative teaching methods and performance, Nazi and Murad (2017) set out to investigate whether innovative teaching has a positive impact on the performance of diverse students. It asserts that students in university classrooms come from a variety of ages, genders, experiences, linguistic backgrounds, and family structures in a study about education in Pakistan. Higher education instructors were polled for the study. Statistics were used to conduct the analyses. The results showed that there was a clear trend in favor of innovative teaching, with the private sector using it more frequently. This study is similar to the present study in the fact that its findings highlight the value of innovative teaching as a vital booster to students' academic performance.

Examining the perceived influence of innovative teaching strategies on academic performance in public senior secondary school students in Port Harcourt, Nigeria, Osuji & John-Uri (2021), adopted a descriptive survey design and a sample size of 394 respondents drawn using stratified random sampling technique. The study used a self-made questionnaire to collect its data. In Port Harcourt Metropolis, Rivers State, public senior secondary schools, students' academic performance was found to be impacted by Zoom and blended learning, two cutting-edge instructional strategies. Based on the findings, it was suggested, among other things, that suitable policies be created for instruction in the use of blended learning as cutting-edge instructional techniques.

Course characteristics, lecturer characteristics and tutorial ratings are important factors that affect students' evaluation of teaching in universities (Fah and Osman, 2011). The study involved 88 undergraduate students who answered a custom-made questionnaire. The majority of respondents, according to the study, firmly concur with how course characteristics, lecturer characteristics, and tutorial rating are assessed. Numerous hierarchical analyses showed that tutoring ratings did not account for the majority of the overall performance ratings, but rather the course, the lecturer's characteristics, and then those characteristics. From the viewpoint of the student, the evaluation process' enhancement of teaching effectiveness may ultimately enhance knowledge acquisition, and for the teachers, the evaluation did provide information for a personal development.

Mbeudeu (2020), in a study on the contribution of teacher performance in dealing with the English learning crisis in Cameroon. The paper makes concrete proposals on teacher continuous professional development in Cameroon secondary education. He made a strong argument for the need to switch from teachers' traditional professional development. In order to improve the performance of teachers and other actors involved in the supervision of instruction in any effective educational system, collaborative design and delivery of continuous teachers' professional development is required. These numerous recommendations are necessary in order to improve teachers' performance in secondary education in Cameroon's English for French-speaking Learners classrooms and significantly lessen the teaching and learning crises that jeopardize the nation's efforts to achieve bilingualism. Since a teacher should stop teaching if he or she stops reading and studying, ongoing professional development of the educator is still a requirement sine qua non for ongoing instruction. While this paper focuses only on professional development, the current study goes beyond to discuss other improvement strategies.

In study on student-teacher relationship, Nelson (2020), discusses how this relationship can enhance academic performance. Students' minds should be developed to critically think about some everyday issues in order to contribute their own share to making societies a better place for people to duel in light of the fact that education has been and continues to be an attempt to assist the human races in discovering their place in time and society. He argues that people continue to wonder why students don't learn to the fullest extent possible even in the face of well-crafted curricula and excellent teaching resources employed in universities. Since a strong student-lecturer relationship can enhance academic performance and, consequently, ensure the quality of university education, many universities have launched initiatives to strengthen this bond. Despite this, research suggests that lecturers' opportunities to interact with students outside of the classroom are decreasing. This essay aims to lay the groundwork for the institutionalization of a systematic academic plan designed to improve the rapport between students and lecturers. Twenty former students and fifteen lecturers took part in the study, which used a qualitative research design. The importance of the relationship between students and lecturers in a university education is acknowledged by both former students and the lecturers. However, they disagreed on the best way to handle this kind of interaction. They all insisted on the establishment of institutionalized professional counseling offices to help students with academic concerns outside of lecture rooms.

However, as the former students made clear, this should only be used as a supplement to student-lecturer interaction rather than as a replacement for it.

Teaching methods have through research proven to significantly affect the academic performance of students; therefore, for educational authorities to ensure quality education, best teaching methods should be encouraged and rewarded. Okwuduba and Okigbo (2018), argues that though this is true, there are discordant views on the results. A meta-analytic review is used in the study to integrate research on the impact of teaching strategies on Chemistry students' academic performance that was done in Nigeria between 1990 and 2010. The quasi experimental review was completed in fewer than six stages, including the following: study collection, study coding, inter-rater reliability assessment, benchmarking for study selection, calculation of effect size, and analysis. The seven categories of teaching methods that were discovered include mastery learning (-0.013), computer-assisted instruction, instructional materials, problem-solving, constructivism or concept mapping, games/simulation/animations, and student grouping/cooperative learning. The significant differences in effect size magnitude were partially resolved by applying the random-model effect size meta-analytic technique. This review's main conclusion is that the study produced the best approach for teaching chemistry.

Effective instructional strategies play a positive role in students' academic performance. Okri and Aglazor (2020), carried out a study to explore the effectiveness of three instructional strategies in the improvement of senior secondary students' performance in Geometry. In 2020, Okri and Aglazor conducted a study to investigate the efficacy of three instructional strategies in raising the performance of senior secondary students in geometry. In three secondary schools in the Ikom Education Zone of Cross River State, Nigeria, there was a case study conducted to examine the relationship between the academic achievement of students and the instructional strategies employed by mathematics teachers. 159 seniors in high school participated in the study, which had a quasi-experimental design. The tool used to gather the data was called the Geometry Performance Test (GPT). According to the findings, students who received instruction utilizing the Cooperative Instructional Strategy (CPIS) and Hands-on Instructional Strategy (HIS) made the biggest progress. While there is significant difference in the GPT scores of students in the experimental groups who were taught using the three instructional strategies, the GPT scores of students taught using HIS, CPIS and COLIS did not significantly differ from those of students taught using the

traditional method. Math teachers should employ a range of strategies to ensure effective instruction and the achievement of the intended learning outcomes at the Senior Secondary School levels.

Problem- based instructional teaching strategy is important in the teaching and learning process because it provides real world and purposeful interactions that help students learn how to work with and learn from a diverse group of people laterally and horizontally within the learning community. In a study by Nafees et al. (2012), general science students who received problem-based instructional training were compared in terms of their academic performance over the course of a three-month term. A problem-based instructional strategy was used with one of the three groups, and a traditional lecture-based strategy was used with the other. Both groups took an exam to determine the students' academic standing. The problem-based group reported significantly higher results than the traditional lecture-based group. In terms of academic achievement, there were statistically significant differences between the two groups.

Regarding the problem-based instructional approach, Alshaikh et al. (2019) conducted a research to compare the learning tool efficacy of the problem –based learning in terms of knowledge retention, recall and reproducibility among junior medical students. Second-year medical students at Princess Nourah bint Abdul Rahman University in Riyadh, the Kingdom of Saudi Arabia, participated in the post-test experimental study. A question about problem-based learning received a score of 25.46 out of 50, whereas a question about lecture-based learning received a score of 2-.26 (p0.001). The percentage of students who scored higher than 60% on examinations based on lectures and problem based learning was 5.5% and 22.2% respectively. A linear regression analysis of exam results from lecture-based and problem-based learning revealed a somewhat positive correlation (r = 0.6358; P 0.001). High achievers and other students did better on topics taught using problem-based learning, according to GPA stratification. Furthermore, there was a consistent variation in the two strategies' scores (P 0.001). The study found that after six to eight months, undergraduate medical students who participated in problem-based learning were better at recalling information than those who attended interactive lectures.

In recent ties, education process research has been dominated by the demonstration of teaching quality through effective instruction strategies. In a research, Baafi (2020) set out to determine how instructional strategies affected Ghanaian public senior high school students' academic

performance. Using proportionate stratified sampling, 210 students and 160 teachers made up the study's sample. The study's objective was to determine which teaching methods were employed in Ghana's public senior high schools and how those methods impacted the way students performed on a national math assessment. The majority of teachers had an average tenure of five years, according to the study, and those who had more than ten years of experience were employing ineffective teaching strategies because they had not participated in formal professional development. The study also demonstrated how instructors inherently employ classroom management strategies and teacher-prepared strategies that promote student discipline. Both strategies, though, failed to fully engage and educate students during the course of the lesson. The report suggests that the Ghanaian government strengthen its policies for school-based teacher supervision and organized professional development for teachers.

The implementation of experiential learning strategies has a positive impact on students' academic performance. Bada et al.(2017), examined the impact of experiential learning strategies on students' academic performance and proficiency level. A quasi-experimental pretest-posttest non-randomized control group design was employed in the study. For the study, two schools were selected using a simple random sampling method. Two research questions and two null hypotheses were included in the study's design. The data was analyzed using an ANCOVA, t test, and descriptive statistics. The study's findings demonstrated the experiential teaching approach's considerable impact on physics students' performance. It also showed that high achievers responded best to the treatment, followed by average and low achievers. The study concluded that teachers should be encouraged to use experiential teaching strategy when the concept of optics in Physics in order to increase students' proficiency in the subject. Because the study examined the impact of experiential learning strategies on students' academic performance, it is relevant to the current investigation. While the current study uses a different design, it also investigates other key issues affected students' academic performance.

Teaching methods are very important in students' academic performance. According to Chia and Fong (2015), writing on teaching through inquiry, a case – based approach, argue that the case study method is widely used in universities across the world. They also assert that the value of using a case study approach in the teaching process has been widely documented in the literature. Through the use of real data to contextualize textbook concepts and discussions of difficult real-

life examples, the case method approach seeks to support students in developing their concept application skills. Currently, statistics are taught in Singapore's primary through tertiary institutions using artificial data and discrete examples, which are frequently taken from textbooks. It is anticipated that students will continue to find tedious building-block statistical concepts interesting and educational. In addition to being based solely on calculations, there is no real-world application or connection made by the instructional activities. As a result, students are less likely to understand the significance of practical applications in statistical computations. This paper investigates the possibility of employing significant real-world examples in statistics education. Such a method has the advantage of promoting students' active learning, which in turn promotes better application of the concepts being taught.

The internet nowadays has become the all-round teacher and is the leading sources of vital information today. Abubakar and Salmanu **(**2018), examined the contribution of the technology (internet technology) toward the enhancement of Job performance amongst secondary school teachers in central senatorial district of Kaduna State. Six local secondary schools were used in the study, which used a survey research design which was chosen based on the availability of internet facilities. With a population of 6000, it made use of both primary and secondary data sources. An evaluation form of questionnaire with two sections-one based on teachers' perceptions of internet usage and the other serving as a gauge of teachers' job performance-was the instrument used in this study. Simple frequencies, mean, and standard deviation were used to test the question and the research hypothesis, and the F-test (ANOVA) and (PPMR) correlation coefficient were used to determine whether to accept or reject the null hypothesis. The findings demonstrated the significance of the internet in secondary education and the benefit of ICT for teachers. Therefore, the study recommended the need to encourage teachers to utilise ICT in teaching and learning. In order to accomplish this, teachers must continue their education and cultivate positive attitudes toward the use of internet technology in their fields. The stakeholders in secondary school education are also urged to guarantee that only computer-literate teachers are hired. It has also been brought to the attention of curriculum reviewers that they need to create curricula that is current and relevant so that it will jive with the times. This study is connected to the current study because it emphasizes the necessity for all teachers, regardless of experience level, to master ICT as the only means of promoting the achievement of educational goals. However, the study is

carried out in secondary schools and in Nigeria, the current study is carried out in university and in Cameroon. Again, the research design differs with the current study.

The language of instruction is also important in the teaching and learning process. Abudu and Saidu (2017), carried out a study to examine the challenges faced by francophone students in Nigeria universities. They argue that Nigeria, the continent's giant, draws student from many nations, particularly those in sub-Saharan Africa, who are coming in search of opportunities and adequate education. Purposive sampling was used to choose each of the 100 university-enrolled francophones as part of the study's descriptive survey methodology. Data was gathered using a self-made questionnaire. The mean rating and the t-test were used to analyze the data that had been gathered. The study found that students from francophone countries in Nigerian universities faced a number of difficulties, including language barriers, inadequate immersion programs, a lack of cultural understanding, and others. However, it was advised that the school administration organize an orientation program on the cultural values and norms of the nation to inform students. This study is comparable to the one at hand in that it also looked at language barriers as significant obstacles for francophone students in Nigeria. Additionally, a custom-made questionnaire and the descriptive survey design were used. But it's different in that it doesn't emphasize how this language barrier affects those students' performance. While the present study itemizes language and lack of immersion programs in the University of Yaounde as possible causes of poor performance of Anglophone students in a bilingual but predominantly Francophone University, the latter's study is discussing challenges facing francophone students in a predominantly English dominated Nigerian university.

Teachers need feedback to be able to improve on the teaching and learning process. According to Mosa, Panzavolta and Storai (2015), in a paper argue that teachers need feedback and that the use of video recording in the classroom can be important in that direction. The article makes the claim that using video as a powerful tool for behaviour analysis and reflection on implicit teaching practices is akin to self –mirroring. The study's methodology involved the use of instructional tools, and videos were used to analyze the data. Teachers would visualize their positioning in a Radar diagram after reviewing their videos to better understand what elements needed to be improved in order to carry out an effective lesson. Additionally, teachers were asked to peer review another teacher's radar and grid and request their initial feedback. This produced a very effective

exercise to enhance and better plan a lesson for the classroom. In the second section of course, the teachers collaborated in small groups using the cooperative learning model to create a toolkit that provided practical advice and examples drawn from the video recordings on how to conduct a successful lesson. The methodology used, the corresponding tools, and an analysis of the key findings from the pilot are all thoroughly described in the paper.

University Assessment Practices

Assessment play a key role in student learning. Peireira and Flores (2016), in a study discusses how Portuguese lecturers view assessment: The essay examines the perspectives of Portuguese university Professors on assessment in higher education. It focuses on their assessment philosophies and techniques. Five Portuguese Public Universities were used to collect information using in-person interviews and online open-ended questionnaires in various academic fields. 57 teachers in total took part in the study. The results are presented in accordance with the categories that emerged from the data analysis, such as university teachers' conceptions of assessment, the most popular assessment tools, assessment's function, and crucial moments when assessment is used in practice. Implications of the findings are discussed to include the fact that if assessment is not given the attention it deserves, then teaching and learning will not achieve its key objectives. While this study focuses only on assessment, the present study goes beyond to handle other aspects that promote effective teaching and learning while particular emphasis on the role of internal quality assurance.

Harland et al (2014) examined contemporary assessment practices in university focusing on its impact on teachers and students especially the impact of high stakes summative assessment on student learning and teaching at the University of Otago.The study defines high stakes summative assessment as grading student work when it counts toward granting a degree. The current study used a large qualitative sample through semi-structured interviews to ascertain whether the pilot results were replicated across the institution in different subject areas. The research is contextualized by the introduction of semester and modular organizational structures to New Zealand universities in the 1980s and 1990s. Around the same time, most tertiary courses adopted frequent summative assessment throughout each semester in addition to final exams, replacing the practice of evaluating students only through final exams. The effects of frequent internal assessment on student learning and teaching practice have received almost no attention in higher

education, and these radical changes to education have largely gone un-researched. The lack of research into these issues is puzzling given that some of the top assessment researchers in the world have long highlighted the modular educational outcomes needed for a higher education. The research draws from a 2011 pilot project that hypothesized that frequent grading of students defined their entire school experience and present a number of challenges for both teaching and learning. Teachers involved in the pilot program felt they had little control over how they graded their students, even in cases where practices were known to be subpar. It was discovered that grades were an unduly strong measure of the effort that instructors and students put forth. Lecturers found it impossible to break the habit of assigning grades because they were so dependent on them, and students would not complete assignments without a percentage grade attached. The university will find it much more difficult to meet its educational objectives, teach to the graduate profile, and ensure that all graduate attributes are met with such an assessment system. Teachers felt stuck despite being aware of strategies that would promote more in-depth approaches to teaching. Therefore, the link with the current study is evident in approaches to assessment in the university.

There is always mistrust and suspicion by students on teachers assessment of their work. In a study that addresses the mistrust and suspicion that used to follow teachers' assessment of students' class work and examinations. In order to reduce the mistrust that students have regarding their teachers' evaluation of their work, the study set out to determine the degree of agreement between students' evaluation of their classwork and the teachers' evaluation. An engineering drawing class assignment required thirty students to create orthographic views of a rectangular block with a through hole. The teacher came up with a model answer and a marking guide. Students were made aware that the teacher, their peers, and they would all evaluate their work in a blind manner. They were shown the model answer and the marking guide. Each student was required to conduct a blind evaluation of their work and the work of the student seated in front of them. They were asked to submit the ratings they gave both themselves and their peer. In the end, the teacher graded each student's work. All the grades were reviewed by the teacher and the students, and it became clear from the review that most of the time, the teacher's and/or peers' evaluations of the students' work were higher. Students commented on this result, saying they now understand that the evaluation of their work is determined by what is expected of them rather than how the teacher feels about them. Consequently their trust on teachers' assessment of their work got a boost. Assessment

therefore remains an important aspect of quality assurance and strategies must be put in place to ensure its implementation.

Using alternative modes of assessment is important in understanding student learning. Adedoyin (2016) conducted a quantitative study on how students at Botswana's BA Isago University perceived assessment practices in higher education institutions. 400 university undergraduate students were randomly selected to take part in a survey on assessment practices using a four-point Likert scale. 365 undergraduate students participating in various degree programs filled out the questionnaire; their responses were coded and analyzed using the exploratory factor analytic method (a feature of the SPSS software package). With SPSS software, descriptive statistics (means and standard deviations) and factor analysis were produced. The perceived constructs on the idea of assessment practices at institutions of higher education were extracted using the principal factor with iteration and the rotation method. Seven constructs with eight values greater than one were identified by the factor analysis. The results demonstrated how the seven key concepts of assessment practices were perceived, including the use of multiple alternative modes of assessment; the maintenance of formal and informal assessment procedures; the modification of learning outcomes through formal and informal assessment procedures; the identification of students with higher level cognitive and thinking abilities; the provision of constructive feedback for successful student learning outcomes; and the allowance of students to self-reflect and be assessed by peers. The study also looked at whether a student's perceptions of assessment procedures in higher education are significantly influenced by their gender and area of study. It was discovered that students' perceptions of specific assessment practices were significantly influenced by their gender and the faculty of study. Higher education institutions would use all of these undergraduates' perceptions of assessment procedures to guide their evaluation of undergraduate students' cognitive capacities.

Question banks are used to increase the access to quality materials for assessing the students in institutions of higher learning. In a presentation, a good question bank that adheres to the learning – oriented assessment framework should facilitate the tasks for the assessment and support student engagement with some feedback (Chilivumbo, 2015). The goal of the paper is to develop a solution that will enable the streamlined delivery of these properties by higher education institutions' information systems over national networks in Malawi. This paper describes the work done with

the Department of Mathematics and Statistics and the Language and Communication in the Teaching and Media Studies and Applied Sciences faculties, respectively. Data on the development of assessments and the preservation of assessment artifacts were gathered from these two departments via process observation, self-administered questionnaires, and a review of the literature already in existence. Data was obtained from these two departments by means of a self-administered questionnaire given to participants from the two departments. The process using an electronic solution and the current procedure is paper-based. The intention is to enable a tool for question creation, question research, and potentially in the future for assessments are delivered electronically. The system also considers the problem of compatibility of the new system with the universities' current virtualization systems Information management for education and students.

Progress test (PT) is a form of assessment that simultaneously measures ability levels of all students in a certain educational program and their progress over time by providing them with same questions and repeating the process at regular intervals with parallel tests. In a study, Koşan et al. (2019) attempted to create an item bank for the PT and investigate whether the Computer Adaptive Test (CAT) would be a good fit for the PT application. The research was descriptive in nature. There were 1206 medical students present. The psychometric properties of the PT item bank were analyzed using the rash model for dichotomous items. Multiple CAT simulations were run by applying different stopping rules with different standard errors. Estimates from the CAT simulation were contrasted with those produced from the Rasch model's initial calibration, which included all items. Following Rasch analysis, a unidimensional PT item bank consisting of 103 items was obtained. The item bank reliability was found to be 0.77 using the Person Separation Index (PSI) and Kunder-Richardson Formula 20 (KR-20). A significant correlation was found between the estimates from paper and pencil and CAT applications (CAT) for the simulation conditions and at the end of our analysis. Estimation in the CAT can be done with an average of 14 questions (reduced 86.4%) and 17 questions (reduced 83.4%) and a reliability of 0.75. This study demonstrates that it is feasible to create a suitable item bank for the PT and that by incorporating CAT application, the difficulty of administering a large number of items in the PT can be reduced.

The way test item are arranged in a test has an influence on student examinees. Schee (2009), in a study to investigate whether teat item ordering has an influence on students' academic performance. In order to reduce cheating, marketing educators frequently use multiple-choice tests with different question sequencing, paying little attention to how the order of the test items affects student performance. This study replicates earlier studies on the order of questions and student performance, but it also takes academic success into account as a contributing factor. The findings suggest that two measures of academic achievement, rather than the order of test items, significantly influence how well students perform on multiple-choice exams.

Bono and Núñez-Peña (2019) analysed the effects of two different kinds of feedback on students' academic performance in a higher education course involving statistical content. We also looked at the opinions of the students on the value of these kinds of feedback. The primary goal of the study was examined using a sample of 135 students after the rubrics had been validated in a sample of 100 students. Undergraduate students at the University of Barcelona who were enrolled in a course called Research Designs as a prerequisite for their Psychology degree made up the samples. The majority of students believed that both types of feedback were helpful. Students' academic performance was unaffected by whether they used rubrics, attended feedback sessions, or used both kinds of feedback. However, there was a positive correlation between the frequency of attendance at feedback classes and academic achievement. Lastly, students who claimed that using rubrics or attending feedback sessions had helped them feel less anxious before tests showed up did better on them. This study demonstrates how using feedback in teaching methods can help students see their learning more favourably, particularly when the feedback is more tailored to them and provided in-person.

There is a connection between students' academic performance and assessment practices (Daka et al., 2020). Using a mixed method approach and an explanatory sequential research design, the study examined the relationship between assessment procedures and academic performance among undergraduate medical students trained at the University of Zambia, School of Medicine over a nine-year period. The findings revealed that there was little timely feedback provided during the study period, and when it was, it lacked insightful commentary. Additionally, it showed that 28,8% of assessment tasks do not correspond to learning objectives. They come to the conclusion that the University of Zambia's medical school's low student Grade Point Average (GPA) and high

exam attrition rates were caused by flawed assessment procedures. The article suggested that evaluation tasks should be in line with learning goals and that students should receive timely, thorough feedback.

Rawlusyk (2018) conducted another study to address the ongoing question of whether assessment procedures in high education aid in the learning of students. According to the study, the majority of authors argue that the emphasis on exams in assessment has a negative impact on student learning. The study employed a questionnaire and survey to collect data, and the findings indicated that teachers' perspectives on how students use feedback vary, and students' involvement in assessment strategies, which affect learning, is low. The study recommends that educators use professional development opportunities to learn how to best facilitate their students' active engagement in a variety of real-world assessment activities and feedback.

Since comprehensive monitoring and evaluation mechanisms are the only ways to maintain quality assurance in the higher education sector, evaluation is a crucial tool for quality improvement. Obanya and Hountondji (2005) made the claim that formative evaluation significantly improves educational outcomes, and Onuka (2017) cited them. Akyeampong (2011) agreed that better learning outcomes result from assessment that is incorporated into the educational system. When something changes for the better, improvement occurs. Transformation describes this type of improvement or change. Transformation leads to an improved HE system in terms of quality. According to Onuka (2017), evaluating competencies that ought to typically go along with the content of the various curricula is a necessary part of the evaluation or assessment process in higher education. Those seemingly latent skills, such as soft or emotional skills, that need to be rather stimulated in people, must be included in the curricula, taught and assessed as part of the transformation process of African higher education in order to improve the quality of HE provision of the World Bank. Various forms of assessment should be developed in order to evaluate the different kinds of knowledge, soft skills, and hard skills that are required to fit someone in each type of work environment in the current knowledge economy and digital-based development (Ghartey, 2015). Association for Educational Assessment in Africa (AEAA) (2015) is cited by Onuka (2017). Demonstrates the necessity for the African educational system to use elements of quality assessment, such as fairness, ethical considerations, integrity, inclusivity, comprehensiveness and innovation, while evaluating the educational system and its results.

Assessment can be used to develop or improve a system, process, or learning, as well as to judge the value of an outcome. The evaluation of an outcome, whether it be the result of an ongoing process or an outcome, gives the system or process feedback for correction, fostering improvement and accountability. Evaluation identifies who was in charge of what and suggests ways to make a process or system better. Therefore, the dynamics of our digital-world dictates that evaluation of a system or process. The importance of assessment in quality assurance cannot be overemphasized though the presentation has not linked assessment to students' academic performance which the current study seeks to do.

Anyanwu and Onwuakpa (2015) argues that improving validity of tests through improved test development procedures can be an essential internal quality assurance strategy to ensure student performance. According to the study, psychometricians worldwide hold the view that test item quality is primarily dependent on validity and reliability of the items. They went on to say that validity is the more important of the two characteristics of a good test since it affects test results as well as the items' appropriateness and relevance. The paper also emphasized the importance of quality assurance in testing procedures. It identified a few test development strategies to improve measures of test validity, including lengthening the tests, avoiding the use of difficult vocabulary, providing clear instructions in the tests, and organizing the items in the correct order. According to the paper, if these test development procedures are implemented, there will be an assurance in the improvement of the validity of the test.

The way questions are formatted can affect how well students perform academically. The effects of three test item format variations on item statistics and student performance were investigated by Caldwell and Pate (2013). In order to achieve this, the study recorded fifteen pairs of directly comparable test questions and followed three distinct item writing guidelines to either follow the standard scale or deviate from it. The item difficulty and discrimination were compared for both the two scales combined and for each guideline individually. Student performance was also compared between the two. P = 0.03 Compared to the nonstandard scale, the standard scale was 12.7 points easier. The only one of the three recommendations that showed significance was the one to avoid doing "none of the above." The students' overall scores were 41.3% on the non-standard scale and 53% on the standard scale. Nonstandard test questions had a negative effect on student performance, were more difficult for students to answer correctly than standard test

questions, and did not enhance the ability to distinguish between students who performed better and those who did not. When creating a test, item-writing guidelines should be taken into account.

Teachers' practices affects students learning and performance (Zhang and Burry –Stock, 2003). Teachers' classroom assessment practices and teachers' self-perceived assessment skills as a function of teaching experience and measurement training affects student performance. The study asserts that there is widespread concern about the caliber of classroom assessment because teachers are primarily in charge of assessing instruction and student learning. Data on assessment practices were gathered from 297 teachers and analyzed using a MANOVA design. It was discovered that educators are depending more on standardized examinations, and that the caliber of assessments is growing in importance. It also revealed that, independent of their degree of teaching experience, teachers with measurement training report higher levels of self-perceived assessment skills than teachers without measurement training when it comes to using performance measures in standardized testing, test revision, instructional improvement, and communicating assessment results.

Areghan, Agwu and Aidokhai (2012) studied the possible sources of bias in the West African Senior School Certificate Examination (WASSCE) administration and script marking in Nigeria. The West African Examination Council (WAEC) administers the high-stakes international WASSCE exam in Nigeria and Anglophone West Africa, according to the study. The study outlines the practical tactics that WAEC in Nigeria has implemented to broaden the framework for action and improve the efficacy and efficiency of its test administration procedures. It makes the case that a high volume of applications, insufficient funding, and a staffing shortage affect the validity of assessment findings. The study concentrates on pre and post examination procedures, highlighting distortions at different phases. It concludes that there are significant obstacles to administering tests correctly and generating accurate, credible assessment results in the nation because process distortion is a social evil that examining bodies will never give up on. It has also clarified the different steps that the West African Examinations Council has taken to decrease their influence on assessment in order to ensure that test results fairly represent the abilities of applicants.

The best assessment strategies can be marred by examination malpractices. Amadi and Opuiyo (2018), carried out a review on examination malpractices among Nigerian university students. Any

action that compromises the accuracy, dependability, or integrity of any assessment or evaluation system is referred to as examination malpractice. It highlights the likely causes of exam fraud, such as students' fear of failure, parents' desire for their children to succeed, ineffective teaching strategies, students' inadequate preparation, and weak parental roles. It was found that the students lacked the desire to learn, preferring to use any means necessary to ace their tests instead. Some professors, who enjoy categorizing students, occasionally test them on what they learned. Additionally, it was found that the relevant authorities were not doing enough to stop the tree. The following suggestions were made to address the issue of exam cheating: prohibit the sale of handouts to reduce frequent instances of examination malpractice; offer counseling services to students; and provide adequate facilities to support effective teaching and learning. Additional measures to prevent examination fraud include hiring qualified teachers at all levels, enforcing laws against examination fraud, providing adequate equipment for libraries and laboratories, placing less of an emphasis on paper certificates, and utilizing continuous assessment strategies.

Examination malpractices also have far reaching consequences on the quality of graduates in tertiary institutions. Damare and Kawugana (2021), in a study focused on the impact of examination malpractice on the quality of graduates in tertiary institutions of Bauchi state. The study posits that examination malpractice is a cankerworm that is posing a serious problem in Nigerian educational system. The research design used for the study was both qualitative and quantitative and data was collected through a questionnaire and interview. The data collected was analyzed using STATA statistical tools. The initiative offered social engineering and reorientation to update moral standards: It advocated for the proper indoctrination of moral principles in our youth and advised parents to stop encouraging their kids to cheat on exams. Again, the management of exams must only be entrusted to upright people. Based on the conclusions, recommendations were made, including proper student counseling, increased public awareness campaigns, stringent candidate interviews, and a focus on practical performance rather than reliance on certificates (paper qualifications). In order to help students develop strategies for effective study habits, Petters & Okon (2014) also recommend effective counseling services in schools.

Hudson (2009) on how marking quality in essays or long form answers has been approached traditionally and explains how using images of candidates' answers can enable the use of new

quality mechanisms in a similar study on improving essay marking quality. He speculates that major developments have been made that combine the use of scanning technology, marking algorithms, and appropriate sampling criteria to provide a dynamic approach to monitoring marking variances. The study recommends a combination of assessment formats as the most effective way to strike a balance between marking reliability and content validity because the procedures used are focused on minimizing the variance gap between individual markers and between markers and established marking standards.

Effective internal quality assurance strategies enhances the teaching and learning processes and consequently affects students' academic performance (Swanzy, 2009). Twenty important informants were interviewed, and document analysis was done to determine how Ghanaian polytechnics handle difficult quality assurance scenarios. Due to the fact that staff and students were the groups most impacted by quality issues, the research revealed that their internal quality assurance strategies focused on these groups. In order to deliver excellent vocational and technical education, polytechnics still needed to re-institutionalize their quality systems, even though it seems that these strategies have improved teaching and learning there. This study is pertinent to the one that follows because it addresses the same topic, though in Ghana. The study places a lot of emphasis on the faculty and students who are the main participants in education, but it neglects to emphasize the significance of the curriculum, assessment, and evaluation in university internal quality assurance. This present study seeks to fill the lacuna.

Quality assurance strategies such as quality audits should play a major role in assuring accountability in universities and other tertiary institutions (Hayward, 2006). In an attempt to understand the elements that go into the accreditation and quality assurance of higher education in Africa, the study highlights the significance of quality audits. It is suggested that the introduction of quality audits should be a welcome change, given that the majority of universities are not held accountable for their spending, the quality of their programs, or the teaching and research output of their faculty members. In many African countries, the public is strongly in favor of the growing demand for accountability. It would provide the private sector with a desperately needed way to spot fraud and subpar products. The paper raises important issues regarding quality assurance but does not connect them to students' academic success in postsecondary institutions.

Quality assurance strategies have been used in many aspects of higher education, including teaching, learning and assessment (Sadler, 2017). All effort should be made to get academic achievement and quality assurance in higher education. Quality assurance requires a critical examination of its fundamental principles, at least in the latter area. Finding and promoting changes to the learning environment that are likely to enhance learning outcomes has been a common but ineffective strategy. They are merely labeled "quality assurance" without any proof of efficacy. The fact that the necessity of quality assurance has been largely assumed to be self-evident is part of the issue. Principles of quality assurance were initially developed outside of higher education. Standards for auditable products, services, and other things are crucial in those. Though external processes do not directly apply to higher education, their underlying principles offer useful perspectives and pointers for improving testing and grading as well as rethinking quality assurance. When applied to real student projects, performances, and course grades, credible and well-crafted academic achievement standards should serve as the foundation for quality assurance.

Cameroon’s higher education like other developing countries has been experiencing pressures from the society such as increase enrolment that demands large class size and the need for quality education which invariably needs quality assessment (Tanyi, 2020). Quality assurance requires a critical examination of its fundamental principles, at least in the latter area. Finding and promoting changes to the learning environment that are likely to enhance learning outcomes has been a common but ineffective strategy. They are merely labeled "quality assurance" without any proof of efficacy. The fact that the necessity of quality assurance has been largely assumed to be self-evident is part of the issue. The initial development of quality assurance principles took place outside of higher education. In those, standards for auditable goods, services, and other items are essential. Though external processes aren't directly relevant to higher education, their underlying principles offer useful perspectives and pointers for improving testing and grading as well as rethinking quality assurance.

For over the years the Cameroon educational system, the examination boards and higher educational institutions have witnessed examination irregularities (Tanyi and Wirngo, 2015). There have been persistent assessment irregularities and examination malpractices in tertiary education. The study argues that between 2005 and 2015, some school personnel are said to have

leaked examinations while many students are also said to have cheated during the writing of examinations. Additionally, they assert that in June 2015, there were egregious assessment irregularities at the faculty of education and advanced teachers training institutions that had an impact on the students' performance. Therefore, the study's goal was to investigate the likely reasons behind these irregularities in tertiary education. Assessment tools, the physical and psychological environment, the knowledge of the evaluator, and the student factor were among the variables used in the study. The works of Bandura and Spring (2014) serve as the foundation for the study's theoretical framework. A purposeful sample of lecturers and students from higher education institutions in Yaoundé were used to create four questionnaires. Descriptive and inferential statistics were used and the result and the results indicated that assessments were used and the results indicated that assessment irregularities have a significant impact on examination practice.

Hudson (2009) in a paper on enhancing essay marking quality and presented at the 35th annual conference of the International Association of Educational Assessment (IAEA), presented various techniques in ensuring quality in marking candidates' scripts. It presented the conventional methods of marking essays or long form responses and explains how employing candidate response images can facilitate the application of new quality mechanisms in marking. The study postulates that notable developments have been made that combine the use of scanning technology, marking algorithms, and flexible sampling criteria to provide a dynamic approach to monitoring variances. The study concludes that using a variety of assessment formats is the most effective way to strike a balance between marking reliability and content validity because the procedures used aim to reduce the discrepancy between individual examiners and between examiners and the established standards.. The study is helpful is helpful to this present study in that it focuses on improving assessment quality for quality students results, though the study fails to correlate marking quality to the performance of students.

According to Downing and Halayna (1997) on test development, validity evidence from quality assurance procedures, validating the results of high –stakes examinations requires assembling and organizing evidence to support a specific interpretation of the test results or their use in a specific context. They argue that the primary sources of validity evidence are the item development process and item responses. An ideal process is identified that describes how items are developed and

responses to the items are studied in order to guarantee that the fundamental elements of tests and test items are sound. These arguments form the basis for this study in that they emphasise the important procedures in constructing items that are sound, valid and reliable which are important elements of quality assurance. However, the study does not relate this to the performance of students especially at the university level.

Chiekem (2015), in a study argues that grading is an important component of classroom assessment. The study indicates that grading is likely the most significant assessment choice made by classroom teachers. Even after receiving some instruction on measurement, teachers still assign grades to students based on their subjective assessments of values. Thus, this essay looks at the grading system as a trustworthy measure of students' academic achievement in secondary schools for the benefit of national development. To collect data, a validated questionnaire was used. The research questions were addressed using the mean and standard deviation, and the t-test statistic was employed at the 0.05 level of significance to test the proposed hypotheses. The study's findings showed that there was no discernible difference in secondary school student grading practices between male and female teachers. Once more, there was a noticeable difference in how accurately teachers in rural and urban areas graded students' work in Delta State secondary schools.

Thus, it is recommended that traditional methods of managing schools be replaced with new, inventive approaches, such as the introduction of a tripartite curriculum to instill multiple intelligences rather than just one. The three-part curriculum structure ensures that students are exposed to material from their own discipline, material that is pertinent to their discipline but is taught by other disciplines, and content that is specifically not from their open discipline. Therefore, Nigeria's current paradigm shift toward a new secondary curriculum will undoubtedly be successful. This article is pertinent to the current study in a number of ways. It emphasizes two things: first, the significance of quality assurance, particularly internal quality assurance indicators; and second, a new curriculum to promote multiple intelligences. However, the work focuses on quality assurance indicators in secondary schools unlike this present study which duels on universities and ignores to discuss internal quality assurance strategies which the present study seeks to highlight.

In another study, Cockrell (2016) addressed long standing worries regarding the grades teachers assign and the true meaning of grades in a different study. In an effort to establish a connection

between students' performance grades and their actual end-of-course achievement level, teachers expected end-of-grade and end-of-course achievement levels. Calculated correlations were found between pairs of achievement measures, including performance grades and anticipated course completion levels. Although correlations between students' performance grades and standardized assessment scores were similar to those found in previous studies with similar samples, the relationship between these two measures of student achievement and the marks reporting teacher expected standardized assessment scores suggested that teachers underestimated differences between performance grades they assigned to students and those students' actual standardized assessment scores. Overestimating or underestimating students' learning capacity has significant repercussions because it affects how well students and parents perceive the efficiency of the educational process. The study makes the case that teachers' capacity to match suitable levels of instruction to students' needs in order to maximize learning outcomes is also negatively impacted by misunderstanding or misrepresenting students' levels of learning. This study is relevant because it is discusses an essential component of teaching and learning.

The usage and incorporation of test item banks in the classroom as well as the motivations for their use and its influence on experiential learning is an important internal quality assurance strategy (Marshall, 2014). A questionnaire was used as a data collection tool as well as descriptive research design. The study shows that valence, instrumentality, and expectancy are the three bases on which a person's motivation is based. Valence is the term used to describe a person's desire for a particular result, instrumentality is the person's belief that his actions have some bearing on the result he wants, and expectancy is the term used to describe the amount of effort a person puts forth to achieve a particular result. The findings support the earlier claim that item banks in educational settings foster learning. Therefore, the availability of item banks ensures fair assessment and promote learning. While this is true, the present study discusses the creation of item banks as an obligatory action path for all universities so as to ensure internal quality assurance in assessment practices.

Discussing the importance of item banking to public examinations, Opara, Onoja and Oguche (2014), argue that the creation and depositing of several calibrated test items which can be grouped into parallel forms from which tests can be withdrawn and use randomly is the best way to ensure examination security. The study suggests that with the Joint Admissions and Matriculation Board’s

(JAMB) adoption of the Computer Based Testing (CBT) as a testing format in 2013, the use of item banking became essential in test administration. This essay's goal is to highlight the benefits of using this technology for the Unified Tertiary Matriculation Examination (UTME) and the NABTEB test. Testing bodies can determine the relative difficulty of specific items thanks to benefits like cost effectiveness, contribution to examination security, and ability to help establish curriculum goals and objectives. The paper reiterated the need for testing bodies to be more knowledgeable about technologies that could help maintain the integrity of the exams they conduct as it came to a close. The paper recommended the adoption by testing bodies of a robust item banking system that provides the automation, standardization, and scalability essential to developing and maintaining effective tests for a more efficient test administration in Nigeria and Africa, in general. While the paper recommends the use of item banks in keeping standardized test in measuring scholastic achievement for examination bodies, it is evident that item banking is relevant in every testing exercise that is to determine student performance.

There have been significant increase in test cheating, unpermitted student collaboration and an increased prevalence of chronic cheating in examinations both in college and tertiary institutions (Muchai, 2014). The study addresses the causes of widespread exam cheating, the techniques employed, and its recommendations. An unethical society, inadequate instruction, a bad learning environment, a lack of productive study habits, inefficient time management, antiquated technology, and a lack of facilities are all factors that contribute to students learning dishonest behavior. 22 participants in the study were selected at random from two technical schools in Kenya. Four lecturers who were directly involved in the administration of the exam, sixteen students who had either cheated on it or knew of others who had, 4 lecturers who were directly involved in the administration of exams, and 2 examination officers who provided previously gathered documents on cheating made up the participants. In order to gather information for a qualitative case study, structured interviews, document analysis, and observational methods were all used. Research-based categories were created from the transcription of the interview data. The study’s findings highlight a number of factors that lead to cheating and suggest that frequent testing and assignment administration, stringent examination supervision, and the provision of suitable facilities can all help to reduce cheating. While limited and lacking a clear indication that they can be placed under the purview of an internal quality assurance agency, the recommendations are in line with the current study.

In a study, Khamis and Bakar (2012) argue that students can develop their soft skills and learning experience through the use of group projects. The current study aims at individual's group performance based on their individual presentation marks, as well as their strengths and weaknesses. The concept of group management is discussed in the paper as a way to evaluate students' contributions to group projects in a classroom setting. Additionally, based on two consecutive semesters, individual performances in courses with similar content were compared. First-year students who took comparable courses both semesters served as the study's respondents. Peer reviews and lecturer evaluations served as the basis for performance evaluation. For both semesters, the evaluation standards were the same. The study's conclusions showed that peer review and lecturer evaluations can be used to assess how well students performed in a group project, and these two evaluation. This study highlights other methods of effective and fair assessment practices and while the current study discusses same, it goes on to link it with students' academic performance and as an internal quality assurance strategy.

Feedback is very important in improving learning experience for students (Mamnoon Al Bashir, Kabir and Rahman, 2016). According to the study, this has a major impact on the professionalization of higher education teaching as well. Nonetheless, feedback is seen as a difficult issue in this field. For feedback, most lecturers still employ the traditional format. In many cases, students are not satisfied with this kind of feedback in terms of improving their educational experience. It is time for the instructors to reevaluate the feedback-giving procedure. Teachers should avoid giving students feedback in the traditional way. This essay offers some cutting-edge, technologically based feedback methods that can ultimately aid students in enhancing their learning experiences. This can also help in professionalizing the teaching of lecturers in higher education. This study highlights the importance of feedback in teaching and learning though if fails to articulate the fact that feedback should be considered as a quality assurance strategy.

Discussing the importance of feedback in higher education, Carles (2022) argues that feedback is a powerful tool for improvement of student learning, yet complex to implement effectively. He posits that using performance –related inputs to improve students' work or learning strategies is what feedback involves. In order to guide their development, new paradigm feedback practices place a strong emphasis on student insight generation, reinforcing the idea that learners are at the core of feedback processes. To make the most use of these insights, learners need to be feedback

literate and able to seize feedback opportunities. In relation to new paradigm feedback practices, five interconnected themes are discussed: peer feedback, digitally enabled feedback, feedback in online learning environments, feedback literacy partnerships, and feedback seeking strategies. Effective feedback in education is an important element in satisfying student learning, therefore, when feedback is ineffective, student learning is affected negatively. Feedback is considered in the current study as an important internal quality assurance strategy which must be promoted and enhance by the university authorities.

Effective teaching and adequate feedback is powerful ways of enhancing learning. Both students and teachers need to seek out and learn from feedback, such as test answers, and an assessment is only valuable to both parties when it facilitates this kind of learning. In order to determine how feedback affected students' performance on end-of-semester exams in Health Training Institutes, Zotorvie et al. (2014) conducted research. Its specific goal was to learn more about the various feedback techniques and how they affected the academic performance of the students. 460 students and tutors participated in a questionnaire-based data collection process. The findings showed that the institute used fill-in-the-blank, multiple-choice, and essay questions in exams, projects, assignments, and project work as its assessment tools. Depending on the size of the class, tutors administer an average of (1-3) quizzes. The findings also show that receiving feedback has no effect on students' academic performance; however, students would have performed better if they had received feedback on time, and the best time to receive feedback may vary depending on the feedback's content. Due to the limited time allotted for teaching and learning, tutors must use some of the instructional time to provide feedback to students. Additionally, it is challenging for tutors to give students feedback because of the size of the class. In the absence of feedback, students proceed through various courses without assessing their performance, ultimately failing the final exam-like the licensing exam-and dropping out. While peer review is another method for managing the workload to guarantee lots of timely feedback, tutors and students should be encouraged to use technology for aided learning and unlimited and timely feedback. Tutors must, however, teach students how to conduct small-group peer review.

The university should adopt an applicable policy on the promotion of bilingualism and assessment in the institution in follow up to the political effort in promoting bilingualism. While the University of Yaoundé 1 allows students to write examinations in their best official language, it does not

ensure that the examination questions are in both official languages for clearer understanding but it also fails to ensure that lecturers master content in both languages to be able to effectively score or mark the students' scripts in both languages without bias or inadequacies.. According to a study by Kouega (2010), most Anglophone lecturers of the University of Yaounde 1 are sufficiently bilingual to evaluate scripts written in French to the satisfaction of French students, whereas this is not the case for francophone lecturers. The same study revealed that Francophone lecturers contend that unlike francophone students, who always write scripts with an introduction, body, and conclusion, Anglophone students' scripts are frequently poorly structured and contain too many facts grouped together, making marking difficult. Therefore, it is necessary to address the inconsistent methods and dual language proficiency of all university lecturers. It is only through the mastery of content in a particular language that one can give accurate scores to a script written in that language; therefore, bilingualism should be a condition sine qua non for recruitment and retention for all lecturers of the University of Yaounde 1, if it is to maintain its status as a bilingual university in Cameroon.

Alternative assessment strategies could cause students to be more engaged and motivated to study and this may influence their academic performance. In a thesis, Krawczyk (2017) examined how different assessment strategies affected students' motivation, engagement, and general learning in an urban private Montessori middle school program in the Midwest of the United States of America. Over the course of six weeks, two phases (one social studies and one science unit) involved two teachers and thirteen students. Teacher-assigned grades for assignments and classes have been replaced by final grades set by students based on their own self-assessment using collaboratively developed rubrics and personal portfolios. Students kept daily learning diaries and took part in pre- and post-unit surveys to determine their level of engagement, motivation, and preferred learning styles. Daily observational notes and counts of the behavioral indicators of engagement and disengagement were kept by the researcher. Students were also asked to offer open-ended comments regarding their experiences at the end of the intervention. The results showed that although the alternative assessment model did not have a direct impact on students' intrinsic motivation or daily engagement, it did enhance students' understanding of how their work related to a unit's final grade and gave them opportunities to connect what they had learned and more actively plan their next assignments. Additionally, there was a clear link between student

activity levels and their participation in class, demonstrating the value of minimizing passivity as much as possible in the daily learning process.

The society tends to attribute much doubt about the quality of graduates to the activities that are taking place in universities in Cameroon (Agborbechem, 2015). This study set out to identify the psychosocial variables that impact university students' propensity for "sorting." He asserts that the most prevalent of these activities is examination malpractice, and that 'sorting' is a recent development in examination malpractice that is finding it difficult to take off, particularly in Cameroonian universities. The researcher claims that "sorting" takes place in Cameroonian universities through the sale of textbooks and handouts, the direct payment of marks, and "boba jobbing," in which students give up their time to perform odd jobs for their professors in exchange for favors. The study adopted a survey research design. A questionnaire was given to 388 Cameroonian university students in order to gather data. At the 0.05 level of significance, four hypotheses were formulated in their null form and tested. The researcher suggested supporting the formation of inter-university unions for course examinations, which could work together to handle the creation and scoring of course exams. It was also suggested that instructors and students receive more in-depth counseling services, and that those who engage in "sorting" face harsh penalties. This study is pertinent because it addresses important topics regarding higher education in Cameroon.

The propensity to cheat in university examinations is usually very high. Frenette et al (2020) presents a seven-step approach to maximizing the evidence of validity that led to the development of the questionnaire on cheating in University Examinations (QCUE). The purpose of the present research was to develop a questionnaire and to proceed with its validation process in order to measure the propensity to cheat in exams among university students in Quebec’s faculties of education. With good psychometric properties, the QCUE meets a need for a French language questionnaire on the propensity to cheat in examinations and allows to measure the scope of cheating among university students. They argue that cheating in universities is a common practice all over the world and global effort should be taken to combat it. The descriptive and inferential statistics was used to analyze the data.

Alhassanl and Anya (2017) discuss the forms and consequences of examination malpractices’ in Nigeria’s schools and universities, argues that education is a process of teaching and learning and

is evaluated through examination at the end of the learning period. This paper defines the terms examination malpractice and its different classifications. It outlined the origins of examination fraud in Nigeria, pointed out indicators of intentional fraud, and explained its causes. The study concentrated on the causes, consequences, and countermeasures for examination fraud in higher education. In conclusion, the study looked at what stakeholders could do to put an end to the disgusting and unacceptable examination malpractices while emphasizing the critical need for institutions to embrace integrity on a sustainable basis.

Examination malpractice has many different causes and manifestations in Nigeria and in other countries. According to Onyibe, Uma, and Ibina (2015), examinations are used during the learning period to assess education, which is the process of teaching and learning. Exams provide the instructor with feedback on the student's level of knowledge acquisition and also serve as a gauge of the student's retention of that knowledge. As a result, any misconduct or irregularity skews this feedback and produces misleading learning outcomes. This essay looks at the origins and manifestations of exam malpractice in Nigeria, as well as its effects on the country's development, past attempts to stop it, and suggested strategies for doing so. Relevant journals and conference papers consulted, and the writers' personal experiences during examination invigilation were the sources of data used in the paper. Exam misconduct in Nigeria has been found to be increasing due to the government's persistent lack of political will to enforce Decree 20 of 1984 and the Examination Malpractice Act 33 of 1999. This essay fervently urges the amendment of the Examination Malpractice Act of 1999 to include the Decree 20 of 1984 provision that stipulated twenty-one years in prison without the possibility of a fine for a convicted offender. And regardless of whose ox is gored, the Act ought to be strictly enforced. This study is related to this current in that it highlights the various examination malpractices and measures to check them. It is relevant in that it draws attention on examination malpractices that distorts feedback and give wrong feedback. Therefore, all efforts must be made by any university to ensure that examination malpractice is completely wiped out to ensure quality education.

Examination malpractices have significant consequences on students' future (Nganchi and Charlotte, 2020). It was based on observations that during examinations, students were seen moving around the examination room, occasionally leaving with examination papers and accompanying invigilators, occasionally out rightly bribing the invigilators. Four research aims

and hypotheses were developed for the study. The study used a questionnaire to gather information from 120 respondents and adopted the survey research design. The findings showed a link between impersonation, cheating, and examination malpractices as well as a negative relationship between impersonation and students' futures. The study provided the ministry of higher education and other stakeholders in education with a number of recommendations.

Enhancing student learning and achievement requires formative assessment. In a fifth-grade social studies class, Ozan and Kıncal (2018) investigated how formative assessment procedures affected students' academic performance, attitudes toward the lessons, and capacity for self-regulation. The teacher who carried out the practices and forty-five of the class's students made up the research group for this mixed-method study. Experiments were conducted for 28 weeks. Social studies performance tests, attitude inventories for social studies classes, self-regulation learning skills scales, semi-structured interview forms, and observation forms were some of the instruments used to collect the data. According to the study, students in the experimental group who engaged in formative assessment techniques performed better than those in the control group in terms of academic achievement and had more positive attitudes towards the class. The students' capacity for self-regulation improved as a result of the formative assessment, but there was no discernible difference in this regard between the experimental and control groups. Based on the researcher's observations and the teacher and student interviews, it was concluded that there was a notably positive general consensus regarding the use of formative assessment.

Summary of Literature Review and Analysis of Knowledge gap

The review of related literature has perused a wide range of studies conducted by different researchers in different places, at different times and motivated by diverse and different objectives. Taking a keen look at the above studies, none of them have carved out clearly in one document the key areas that institutional quality assurance can draw its strategies. But this study invokes internal quality assurance strategies in key areas of university functioning which include university human resources management, provision and management of student learning resources and infrastructure, policies related to student profile and support services, pedagogical practices and university assessment practices. Therefore, based on this present study, most the key areas of intervention to ensure institutional quality assurance become clearer.

Though some of the above studies were carried out in Cameroon, they did not specifically discuss quality assurance issues practiced by the University of Yaounde 1. Again most of the other studies were carried out elsewhere and so differences are evident because of differences in perceptions and realities. Looking at most of the studies, it is clear that there is a relationship between quality assurance variables and students; academic performance, but these past studies failed to highlight the fact that students' academic performance can be improved upon if those variables affecting performance should be use as strategies of internal quality assurance. It is on the basis of this, that this Researcher develops the enthusiasm to carry on with the research.

Most of the studies reviewed concentrated on the causes of students' academic performance, recommending remedies but did not outline clearly, the strategies that can be adopted on a continuous basis that can ensure quality of teaching and learning for reciprocal performance of students. High and consistent performance of students can be sustained only by the adoption of internal quality assurance strategies as highlighted in this present study. Again most of the studies reviewed above, employed quantitative studies using descriptive survey designs which hinders the generation of adequate information to be able to draw conclusions.

In summary, the review of related literature was examined under conceptual, theoretical and empirical frameworks. Under the conceptual framework, key concepts related to the study were identified and explained. On the theoretical framework, the main theories were the Total Quality Management Theory, the Quality Assurance System of Teaching and Learning theory, the Human Capital Theory, the Classical Test Theory, Item Response Theory and the Generalizability Theory. These theories were seen as being appropriate to the problem under investigation. Empirically, the writings, reports and studies carried out in areas related to the study were also examined and gaps identified.

From the forgone discussions on literature review, it can be opined that the concepts and theories on which the study depends have been vividly explained giving a solid foundation on which findings can be reached. Quality assurance for any institution or organisation remains primordial for its survival because quality is the heart of any entity. Inspired by this, the researcher seeks not only to explore the institutional quality assurance strategies of two but diverse major Cameroon universities but to sets out to link it to candidates' academic performance. Apart from explaining the relevant concepts and theories, existing literature related to the study have been reviewed in

an attempt to identify various gaps and how these gaps are filled in this present study. Here, a summary of the writings of recognised authorities and previous research have been analysed and presented. Generally most literature discuss quality assurance but fails largely to show the link between the two aspects which this study seeks to do.

CHAPTER THREE

RESEARCH METHODOLOGY AND PROCEDURES

In order to examine the relationship that exist between internal quality assurance strategies and students' academic performance in the University of Yaounde 1, the third chapter of this study is titled research methodology and procedures. This chapter discusses the methods and procedures that are employed in the study. It follows from chapter two which identified procedures, theories that formed the background on which the study will be conducted.

This chapter adopts the following methodological aspects: area of the study, the research design and philosophical underpinning, the population, the target and accessible population, the sample size and sampling techniques. It further presents the research instruments, validity and reliability of the instruments, administration of the instruments, the data analysis technique, the recapitulative table and an explicit information table for the chapter. The previous chapter x-rayed the evidence that there is need for University management to pay more attention on the quality of university activities, become more professional to be able to ensure that students' performance is not affected by errors in the system.

Area of the study

Yaounde is the capital city of the Republic of Cameroon, a country in the Central African region. Yaounde is located in Mfoundi Division in the Centre region of the Republic of Cameroon. Yaounde covers a surface area of 1 is 180 square km. Yaounde has two state universities which are the University of Yaounde 1 and University of Yaounde II, Soa. This study was carried out in the University of Yaounde 1(UYI), located in the Mfoundi Division of the Centre Region. The University of Yaounde 1 is the oldest university in Cameroon and the lone bilingual university in the country. The study is conducted specifically in the University of Yaounde 1(UY1) main campus at Ngoa-Ekele. The UYI is comparatively the oldest, most populated and has the highest number of affiliated campuses of both private and public institutions in Cameroon.

The university was created in 1962 and was originally known as the Federal University of Yaounde but due to congestion in the few faculties and the need to promote higher education in Cameroon,

the university reform of 1993 did split the country's oldest University of Yaounde into two separate entities: the University of Yaounde I and the University of Yaounde II (SOA). As stated by Marcellus (2014) and Njeuma et al. (1999), the Faculty of Arts and Social Sciences (FALSH), the Faculty of Science, and the Faculty of Law and Economics all had 529 students enrolled when it was first established on July 26, 1962. In addition to the three faculties, there are specialized schools or better still ‘des Grandes écoles’ attached to the university and other professional institutions of higher learning to prepare graduates for professional careers. The university today has a student population of 58617 students with 1042 lecturers (MINESUP Statistical Year Book 2019, July 2020).

Today, the University of Yaounde I has 03 campuses; Ngoa-Ekelle, District of the municipal lake and Nkolbisson. French and English are the two languages of instruction at this bilingual university. Here, the teaching and learning processes involve interaction between the two official languages of the nation. According to the 2019 MINESUP statistical year book, the University of Yaounde 1 comprises 64 courses spread across 54 departments, 5 faculties or schools, 4 specialized centers, 02 virtual universities, and 65 research laboratories staffed by 1042 instructors and 884 administrative and support personnel. It is comprised of four professional institutions that are affiliated with the main faculty campuses, including:

- The Higher Teacher's Training College of Yaounde
- The National Advanced School of Engineering
- IUT Bio of Mbalmayo

The main University complex is in Ngoa-Ekelle with several satellite campuses elsewhere. The Ngoa-Ekele campus has four faculties thus;

- The Faculty of Arts, Letters and Human Sciences (FALSH)
- The Faculty of Sciences (FS)
- The Faculty of Medicine and Biomedical Sciences (FMBS)
- The Faculty of Education (FSE)

Most of these faculties have established in principle but not documented general and specific quality assurance strategies to enable the smooth functioning of the teaching and learning processes in a bit to ensure quality but of all of these, it is only the Faculty of Arts, Humanities and Social Sciences and the Faculty of Medicine and Biomedical Sciences that have internal quality assurance cells but they are more in principle than in practice. However, these cells are seemingly ineffective and inefficient in carrying out institutional quality assurance practices in their various faculties.

The University of Yaounde 1 was selected because of the peculiarity of the area in the characteristics relevant to the study, contiguity to the researcher, accessibility and availability of the population of the study. Therefore, the choice of the institution was crucial for its implications in the generalisation of the research findings.

Research Design

A research design, according to Ngechu (2001), is a plan that describes how problems being studied are going to be solved. It is the technique employed in research studies for data collection, analysis, interpretation, and reporting make up the research design. It outlines the methods to be followed in order to collect the required data, as well as how all of this will be applied to answer the research questions (Grey, 2014). A research design in educational research is the overall strategy the investigator chooses to logically and cogently combine the different study components, guaranteeing that the research problem is successfully tackled. It serves as the guide for gathering, measuring and analyzing data (Ken and Atanga, 1998). The research design is the blueprint for the study or a set of well-thought-out choices that, when combined, form the overall strategy for the research project.

A research design is essential because it makes it easier for the various research operations to run smoothly, maximizing information production with the least amount of effort, time and expense (Amin, 2005). It acts as the holding substance for the investigation. The purpose of the design ensures that the evidence gathered allows the researcher to approach the research problem in a clear and cogent manner. Typically, a research design outlines the methods for gathering data, the instruments to be used, their intended uses, and the intended means of data analysis.

This study adopts a correlational research design. The correlational research design was used by the researcher to help us understand the "why" and "how" of the investigation. It involves measuring two or more variables to ascertain or approximate the degree to which the variables' values are correlated or fluctuate in a recognizable way. A statistical test called a correlation is used to identify the tendency or pattern of consistent variation between two or more variables or between two sets of data (Sharif, 2017). The product moment coefficient is a statistic that represents a correlation statistic as a linear relationship. Thus, the degree to which variables are related is qualitatively described by a correlation research design. The correlational design allows the researcher to predict an outcome, such as the prediction of ability, quality of schooling, student motivation and academic motivation that influence student achievement (Anderson and Keith, 1997). This entails gathering information to ascertain whether and how much internal quality assurance techniques can affect students' academic achievement. From this perspective, the product-moment correlation coefficient, or r, indicates the strength of the relationship. The statistical measure known as the correlation coefficient (r) is employed to quantify the degree or orientation of the linear relationship or correlation between the two variables. The range of values for the r is -1.0 to +1.0. The values for the two factors are implied to change in opposite directions when it is-1.0, but when r is +1.0 it means that the values for the two factors change in the same direction. The more related the variables are, the more accurate the predictions based on their relationships or better still the higher the absolute value the stronger their relationships. The researcher decided to use a correlational research design in order to ascertain the degree of potential association between students' academic performance and internal quality assurance strategies. Determining the relationship's strength and direction is beneficial. Once more, the design is not time-consuming or expensive. The fact that correlational research studies take place in actual settings makes them beneficial. For example, the information gathered from this work is usually more relevant to day-to-day interactions. The Pearson's correlation coefficient was the statistical test used because it was necessary to determine the correlation or relationship between the two variables.

The philosophical assumption for this study is pragmatism. Philosophical assumptions are beliefs about the ontology, epistemology, axiology and methodology of the study (Guba and Lincoln, 1994). Pragmatism is chosen because pragmatist philosophy accepts concepts to be relevant only if they support action (Saunders et al. 2012). It links the choice of research paradigm directly to

purpose and nature of the research questions (Creswell, 2003). Pragmatists acknowledge that there are numerous perspectives on the world and research topics, that no one viewpoint can ever provide a complete picture, and that there might be several realities (Bassong, 2017). The active creation of data and theories by the researcher is emphasized by pragmatists. As cited in Singh (2019), Mackenzie and Knipe (2006) provide a philosophical framework for mixed method research that views pragmatism as a paradigm. In this case, the research problem being studied and the kinds of questions being asked are given more attention (Creswell, 1998).

Population of the Study

A population is defined as the total number of people or objects with similar characteristics (Lind et al., 2017). According to Shukla (2020), a research population is a collection of all the units (people, events, and things) with variable characteristics that are the subject of the study and for which the research's conclusions are applicable. The research problem and literature review serve as the first steps in the population specification process, providing a conceptual description of the population (Macmillan, 1996). The characteristics from which the research findings are derived are determined by a population. As a result, the population represents the entire unit group that serves as the study's focus. The participants in this study are all affiliated with University of Yaounde I. Stakeholders here specifically refer to the teaching staff, administrators, students and the classes and parents without any distinction of their political, economic and socio-cultural backgrounds, and area of origin. This category of persons were chosen because they play key roles in the quality assurance efforts in the university and to provide representative ground for the research results to be applied and implemented for the betterment of the teaching and learning process of the University of Yaounde 1.

Table 4: Distribution of students and Staff Population of the University of Yaounde 1 for 2019 It presents number of students, teaching staff and administrators of the various faculties of the University of Yaounde I)

University of Yaounde 1	No of students	No of Lecturers and administrators
Faculty of Education	1084	08
Faculty of Sciences	25522	352
Faculty of Arts, Letters and human Sciences	22984	214
Faculty of medicine and biomedical sciences	2079	151
TOTAL	51669	725

Source: *Adapted from MINESUP 2019 Statistical Year Book, Published in July 2020.*

Each of the above faculties have several departments. For instance the department in the Faculty of Education are (Basic Education, Educational Management, Didactics of Disciplines, Curriculum and Evaluation, Special Education, Intervention, Guidance and Extracurricular Education); Faculty of Sciences (Organic Chemistry, Microbiology, Earth Sciences, Plant Biology, Animal Biology, Computer Sciences, Mathematics, Physics, Inorganic Chemistry and Biochemistry); Faculty of Arts, Letters and human Sciences (History, Geography, Anthropology, Sociology, German, Spanish, Arts and Archaeology, African Languages and Linguistics, Bilingual Letters, African Literature and Civilizations, Modern French Literature, Philosophy, Psychology, Language Science) ; Faculty of medicine and biomedical sciences (Morphological Sciences, Physiological Sciences, Public Health, Microbiology and Surgical Specialties, Internal Medicine, Laboratory Medicine, Paediatrics, Gynaecology and Obstetrics).

These faculties and departments represent the total population of the study. This population is subsequently segmented into target population, accessible population and sample as presented in figure 5.

Target Population

The target population, according to Fraenkel and Wallen (2006), is the real population to which the researcher hopes to generalize its findings (it was the researcher's ideal choice). The group of people that the intervention aims to study and make conclusions from is known as the target population. The population of interest is defined as the particular, conceptually limited set of potential participants to which the researcher has access. The target population's characteristics, as well as those of any subgroups, should be explicitly stated in the cost-effectiveness analysis.

So from the total population of the University of Yaounde 1, the researcher got a targeted population made up of undergraduate students who must have spent at least two years in the university, graduate students and lecturers/administrators. The researcher used stratified random sampling to select the lecturers and administrators taking into account the fact that most administrators doubled as lecturers or were at one point lecturers. The researcher selected these three faculties because they make up 84% of student and teacher population of the University of Yaounde 1. Again these faculties had established some internal quality assurance policies in their faculties and some of them are functioning though ineffective, and, it was discovered that the population of these three selected faculties make up 84 % of the entire population of the university of Yaounde I. Eligibility criteria for this population are; the lecturers and administrators (Central Administration, Deans and Heads of Departments) who must have served this university for at least three academic years (six semesters), students who must have been full time for at least two years to PhD level and must be presently registered, both participants must master any of the two languages of the University (French or English language). This was important as they will master the phenomenon under study. This gives a target population of 49590 students and 574 lecturers and administration. Since we could not meet with all the respective target participants at the same time and place because of the differences in schedules and over population, we used the accessible population.

Table 5: Distribution target Population of the study

University of Yaounde 1	No of students	No of Lecturers and administrators (Central Administration, Deans and Heads of Departments)
Faculty of Education	1084	08
Faculty of Sciences	25522	352
Faculty of Arts, Letters and Human Sciences	22984	214
TOTAL	49590	574

Source: *Adapted from MINESUP 2019 Statistical Year Book, Published in May 2020*

Accessible population

The accessible population is the portion of the target population that the researcher can access easily. According to Onen (2020), accessible population refers to the portion of the target population to which the researcher has reasonable access and from which sample can be drawn.

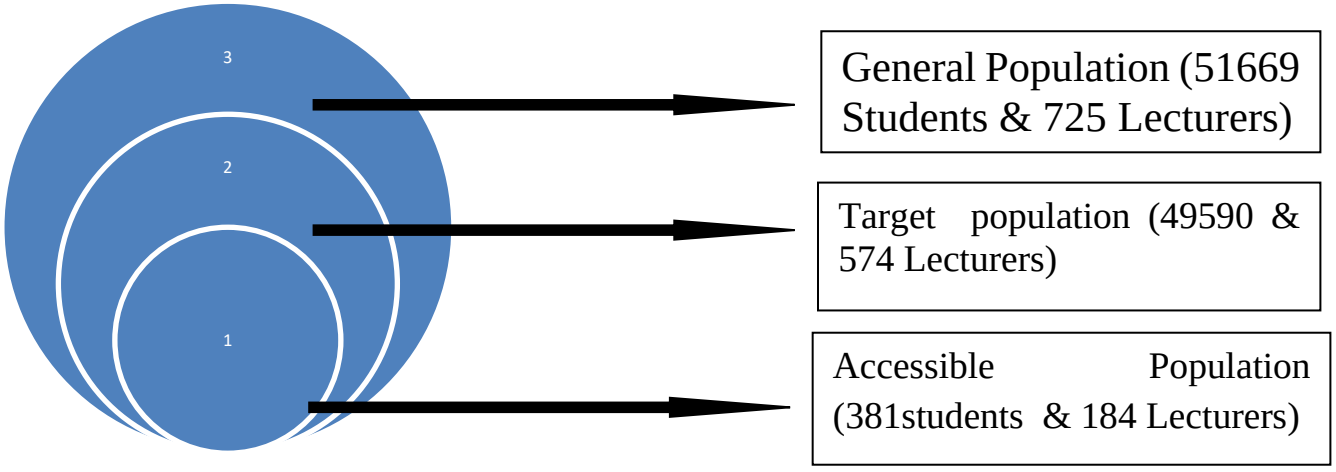
The accessible population of this study therefore involved level three, masters one, two and PhD students whom research team met in school and who accepted to participate in the study. These were basically those the Research had the possibility to administer the research instruments. The Researcher used a period of three months and one week to meet the individual participants immediately after lectures, some of which prefer to use the online version. The researcher used stratified random sampling to draw a sample of 184 out of 574 lecturers and administrators of the University of Yaounde 1 and the simple random sampling to draw a sample of 381 students from three faculties of the university from a population of 49590. This was influenced by availability and readiness to participate in the study. It is worth noting that not all students in the target population could be accessed. There are many reasons why not all Lecturers and students in the target population could be accessed.

Firstly, an academic study of this magnitude did not warrant that all of the targeted population be employed in the study, given the prerequisites of time. Even if the Researcher had the time and

resources to hire research assistants, the small advantages would be negated by the added expense and time commitment, given that research would benefit from a carefully chosen subset of the accessible population. As such, the logistical barriers posed by the size of the target population could not be undermined. Many administrators and lecturers as well as students were too busy to participate in the research and no alternative means was provided. Therefore, they were not possibly part of the accessible population. Thirdly, due to logistical issues, such as adherence to the sampling techniques and processes, some faculties did not fall in the eligibility criterion suit. Such faculties, for which the sampling procedures excluded, had their lecturers and students entirely excluded from the target population. Furthermore, within the selected faculties, not all Lecturers and students in the target population were used. Students who did not fall in the sampling criterion were exclusively excluded. Therefore, the accessible population was composed of Lecturers and students of the Faculties of Science, Education, Arts, Letters and Human Sciences.

Population threshold

Figure 4: Diagrammatical Representation of Population, Target population and Accessible Population of the Study



Source: Adapted from Amin (2005 p. 236)

Sampling Techniques

According to Bryman, (2012), a sampling technique is the manner in which an appropriate sample size is selected for the wider study. In this study, the researcher employed the convenient sampling

technique to select the three faculties under study and the stratified random sampling technique to draw 184 lecturers from the three faculties under consideration and simple random sampling to select the 381 students from the selected faculties of the university. The stratified random sampling technique divides a population into sub groups or strata according to shared characteristics. Stratification is used to make sure that every stratum in the sample is represented so that conclusions can be generalised.

Lecturers were sampled using the stratified random sampling technique. Stratified random sampling is a type of probability method used in research whereby the entire population can be broken down into non-overlapping homogenous groups and randomly select final members from various strata. This reduces cost and improves efficiency. So, the lecturers were stratified into four groups, which were Assistant Lecturer, Lecturer, Associate Professor and Professor in ascending order. 184 Lecturers were selected from a total of 565. Out of a population of 565, Lecturers of various ranks in the faculties of Education, Arts, Letters and Human Sciences and the Faculty of Science, 62 members were chosen from those ranking as Lecturers while 61 were chosen from each of the other strata. (see table 6)

Table 6 : Population of Lecturers by Faculty and rank

Faculty	Professor	Associate Professor	Lecturer	Assistant Lecturer	Total
FALSH	32	54	76	52	214
FS	79	116	118	39	352
FE	01	0	04	03	08
Total	112	170	198	94	565

Source: MINESUP Statistical Year Book 2021 (table 216)

The students were subdivided into various strata which were simply their levels. This included students of the third year Bachelors, Masters 1 (M 1), Masters 2 (M2), PhD 1, PhD 2 and PhD 3, each of which was considered a stratum. Therefore out of the 381 students, in each stratum 63 students were selected randomly from the each of the three faculties.

The Sample of the Study

According to Onen (2020), a sample is a subset of individuals or items that have been specifically chosen to represent the target or accessible population in a study. Thus, the collection of units involved in the study is referred to as a sample. It is a portion of the population that shares the same traits as the overall population. The lecturers and students were chosen for the study using stratified random sampling and simple random sampling, respectively. The maintained a sample size of 401 in light of the fact that a survey study requires a larger sample size. However, the researcher used the sample size table as per Research Advisors (2006) for convenience. They claim that a lot of researchers (and research texts) recommend that the table's first column (Confidence Level = 95%, Margin of Error = 5%). The researcher just needs to figure out the population size down the left column in order to use these values (if precise population size is not stated, use the next highest value). The sample size needed to produce a Margin of Error of 5% for any population proportion is indicated by the value in the following column. Consequently, we employed this table to validate our student sample size of 381, a figure that enables us to generalise the findings to the full student body. The researcher used all twenty lecturers and administrators who agreed to participate in the interview. As a result, the total number of students, instructors, and administrators who took part in this research made up the study sample of 565. The sample used was same as accessible population. This sample can be used to make inference about a population or to make a generalisation in relation to existing theory and it all depends on the choice of sampling technique.

Table 6, above shows the sample size table that shows a sample of 381 student population and 184 lecturers

Table 7: Table showing target population, accessible and sample size

Faculties	No of Students (Stds)	No of Lecturers and administration (Ltcrs)	Target population	Accessible population		Sample size	
				Stds	Ltcrs	Stds	Ltcrs
Faculty of Science	25522	166	25688	139	92	139	92

Faculty Education	1084	114	1198	109	05	109	05
Faculty of Arts, Letter and Human sciences	22984	203	23187	133	87	133	87
Total	49590	574	50073	565		565	

Source : Field data (2021)

Sources of data, Instruments for Data Collection and Methods of data Collection

This involves all the instruments and methods employed in the process of data collection and the sources from which the data was gotten.

Sources of Data

In research, data sources are classified into two; which are the primary and secondary based on their sources.

Primary Data

Primary data is a type of data that which has never existed before; hence it was never previously published. Primary data is collected for a specific purpose, which implies that they are critically analysed to find answers to research questions (Saunders, et al. 2012). Primary data is gotten mainly from observation of the events, processes, manipulation of variables, and contrivance of research situation including the performance of the experiment and responses to the questionnaire. When data take any of the forms listed, it gives rise to another source known as a secondary source. In this research work, the primary data was collected using a questionnaire and that we developed.

Secondary Sources

Secondary sources are generated by primary sources. The data collected from secondary sources is secondary data but secondary data emanates from the processing of data from primary sources that was carried out and published by previous researchers. According to Saunders, et al. (2012) Secondary data is the type of data that has been previously published in journals magazines,

newspapers, books, online portals, YouTube videos, blog pages and other sources. In this study, we derived our secondary sources from data-based gotten from the various departments, reports from the ministry of higher education, quality assurance documents and reports from the national employment fund. The researcher also exploited books, internet, thesis, YouTube videos, TV .interviews as secondary sources to collect data for this study.

Research Instruments

In research, the instrument is any device that enables the researcher to systematically collect the data such as questionnaire, interview guide, focus group or observation.

Description of Questionnaire

The Questionnaire

A questionnaire is a type of research tool used to collect data from participants. It is made up of several questions. The questionnaire was used in this study because it allowed the researcher to gather sufficient, accurate, and unbiased data. Because it is time and money efficient, the researcher can collect a lot of data from a larger number of respondents in a comparatively short amount of time. According to Mugenda and Mugenda (1999), questionnaires are perfect for survey research and are frequently used in the field of education to gather data on practices and conditions that are in place as well as to swiftly and precisely gather information about attitudes and opinions. The questionnaire is a meticulously crafted tool for gathering information in line with the parameters of the research questions and hypotheses. It is a form consisting of interrelated questions prepared by the researcher about the research problem under investigation and based on the objectives of the study.

The questions were constructed in compliance with the research question and objectives. The researcher designed two related questionnaires for students and lecturers. The students were used in the researcher to check and validate lecturers/administrators' responses, and also due to differences in experiences in quality assurance practices. Again, the researcher collected data from the students and lecturers so as to mitigate possible bias. Again there were certain areas of the questionnaire that could not be addressed by students while the lecturers' responses acted as a backup and vis versa. The two self-made questionnaires used were each presented in two main

sections: personal or demographic information (gender, age, level of education, experience, faculty, department) and the second part was questions on independent variables (university human resources, student learning resources and infrastructure, student profile and support services, university pedagogic practices and university assessment practices) and the question of academic performance (skills or knowledge gained, certification, promotion, behaviour) presented according to the hypotheses.

The questionnaire for the students and lecturers were similar in that it had same sections with same independent variables but different in that some sections especially section II of the independent variable (university human resources) had more items for lecturers than for the students.

The questionnaire was the main instrument for data collection and was divided into the following sections:

Introduction: The objectives of the study and the researcher were both introduced in this section. It also addressed the issue of ethical consent by asking respondents to participate in the study, making them aware that they had the right to decline or end the process even before it had started.

Section 1: **Demographic information**. This section provides the following information; sex, age, present year or level, department and faculty. The purpose for collecting this data was to be able to check variances should need be. For the sake of posterity, other researches may need these kinds of information.

Section II: University Human resources (Lecturers, administration and support staff). Here key issue relating to recruitment, retention, staff support services and promotion were considered. The human Capital theory was used to back up this section. This section has 8 items for students and 16 items for lecturers

Section III: Learning resources and infrastructure. Resources that support student learning and infrastructure such as availability of lecture halls, laboratories, libraries, computer laboratories, health services and sporting facilities were considered. This section had 17 items for students and 14 items for lecturers.

Section IV: Student profile and support services. Student learning is dependent on student profile and support services, therefore issues relating to admission procedures, student qualifications,

availability of scholarships, counselling services, restaurant, halls of residence and services related to the physically challenged are included in this section as key to the success of students. This section had 13 items for students and 13 items for lecturers.

Section V: Teaching and learning (University pedagogic practices). This section was concerned with the teaching methods, teacher/student evaluation of teaching and learning, effective feedback and management of learning processes. The section had 12 items each for the students and lecturer.

Section VI : University assessment practices. A critical part of the teaching and learning process in higher education is assessment practices. Assessment practices have a wide range of roles to play in the context of the teaching and learning process, according to a piece by Dr. Santhosh Areekkuzhiyil, an assistant professor at the Institute of Advanced Study in Education, Thrissur, Kerala, India. These duties include giving feedback to students and teachers, forecasting the performance of students in the future, and ensuring that students benefit from ongoing assessment and evaluation. In this section all assessment practices including item development, test administration and test scoring measures are considered and evaluated. This section had 10 items each for the lecturers and the students.

Table 8: Description of Questionnaire

Hypotheses	Indicator	No of items(students)	No of item for lecturers	Measuring scale
RH1	University human resource	08	16	4 point Likert scale
RH2	Learning resources/ infrastructure	17	14	4 point likert scale
RH3	Students profile and support services	13	13	4 point likert scale
RH4	Pedagogic practices	12	12	4 point likert scale
RH5	Assessment practices	17	17	4 point likert scale

Total	67	72	

Source: *Researcher (2021)*

Weighting the Scale

The measurement scale was a four-point Likert scale presented orderly thus: (Strongly disagree-SD= 1, Disagree-D=2, Agree-A=3, and Strongly agree-SA=4). The likert scale was used based on the objectives of the questions whose intention is to satisfy the focus of the study. So positive items will produce negative results. From the objective of the research, all the items were affirmative, thus all negative responses had high points. Four-point Likert scale was chosen because it is more reliable for recording opinions or ideas. It equally eases data analysis through the Statistical Package of Social Science (SPSS, version 21). The respondents were expected to Tick (√) the options most suitable to them. It should be understood that consideration was taken on changes that may occur depending on the nature of the items

According to Tanah and Encho (2017), a questionnaire refers to regulation or guide which enables a researcher obtain a decision on whether to accept or reject an issue as seen below.

$$\text{Mean}=\frac{4+3+2+1}{4}=\frac{10}{4}=2.5$$

This means that any factor with a mean of 2.5 and above was accepted (positive) while those less than 2.5 were rejected (negative). Each questionnaire was made up of closed-ended questions and was to be answered anonymously and not obligatory. (*see appendix 1).*

Validation of the Research Instruments

Normally, reliability comes before validity in most write ups. It is imperative that the reader comprehends that even though an instrument is dependable, improper use can render it invalid. Nevertheless, the validation or build-up process needs to be interpreted scientifically in order to have a trustworthy instrument in and of itself.

This section considers questionnaire use as the protocol that made them valid for the study. Thus, we quickly review the following: the necessity of questionnaires; the use of previously validated questionnaire items; additional design features; question ordering; distribution strategies; return rate maximization; handling of non-responses; and the necessity of piloting.

Validity refers to how well a test measures what it is purported to measure. Validity determines whether the results obtained satisfy all the requirements of the scientific research method and covers the entire experimental concept. Since instruments are made to measure things that researchers want to measure, it is the researcher's responsibility to determine how well the instruments capture the intended subject matter. A measure of the truth or falsity of the data collection instrument is called validity. It falls under the categories of instrument validity, both internal and external. This is the most important measure to take to make sure the research instruments serve their intended purpose as every instrument is designed for a particular purpose. Once it is designed appropriately, it measures rightly, and if it is faulty, it misses the target. Validity is an important requirement for both qualitative and quantitative studies (Cohen et al. 2007). To verify the extent to which the research instruments conceived for this study measures accurately what they were intend to measure, the two instruments are subjected to content validity.

Face Validity of the Questionnaires

Face validity is about whether a test or any measurement tool appears to measure what it is supposed to measure. It is concerned with whether a measure initially appears relevant and appropriate for the subject matter it is evaluating. The instruments were then initially shown to a few professors and research specialists, who reviewed them, made some changes, and concluded that the instrument was appropriate and objective given the subject matter and its coverage of the whole topic under investigation. After that, it was taken to the supervisor of the researcher for review and cross-examination. She examined the items by checking the language, clarity of the questions, relevance of the items to the objectives of the study, and items' ability to accurately represent a common theory and practice. After a succinct scrutinisation of these instruments together with the researcher, the former brought in more corrections and modifications which were modified by the researcher. After a third examination, the items on the questionnaire were confirmed valid and relevant to the study thereby confirming the face validity of the instrument.

Content Validity of Questionnaires

When assessing the utility of an achievement test, content validity which measures how well a test represents the universe of items from which it is drawn becomes especially important (Salkind, 2000). According to Amin (2005), the extent to which an exam measures the things it was designed

to measure is known as content validity. It demonstrates how well the instrument captures the range of abilities, attitudes, perceptions, and knowledge that the respondents are supposed to possess. The extent to which a measurement experiment truly reflects the variables intended for measurement is known as content validity. In this study, the designer of the instrument made sure that all the questions asked in the questionnaire fully exhaust all what was implied by the research question and hypothesis. The researcher conducted a pre-test and pilot study and using the results of the pilot study, the content validity index (CVI) was computed using the formula as follows.

$$\text{CVI} = \frac{\text{Items rated relevant / very relevant by both rates (3 or 4)}}{\text{Total number of items in the instrument}}$$

$$\text{CVI for students' questionnaire} = \frac{04+12+11+13+15+06}{82} = \frac{61}{82} = 0.74$$

$$\text{CVI for Lecturers' questionnaire} = \frac{14+13+11+12+17+06}{79} = \frac{73}{79} = 0.92$$

From the above calculations, the questionnaire for students had a CVI of 0.74 while that for the Lecturers stood at 0.92. The instruments were confirmed valid as their corresponding CVIs calculated were within the accepted range of 0 to 1.

Reliability of the Instrument

Drost (2011) defines reliability as the degree to which measurements can be repeated by different people using purportedly different instruments measuring the same thing at different times, under different circumstances and with different instruments. To put it another way, reliability is the stability of a measurement under a range of circumstances. It is the consistency of a measurement over time. Reliability of the instruments in the study was concern with how consistent the results obtained with the instruments are. If the same result can be consistently achieved by using the same methods under the same circumstances, the measurement is considered reliable. Asika (2012) opines that a researcher who designs a research instrument should be more concern about how consistent the result he obtains from the instruments are. It should be intended to ensure that the instruments give similar, close or even the same results if the study to which the instrument was applied is taken all over again even by a different researcher under the same assumption and

condition. Reliability is invariably the consistency between independent measurements of a phenomenon. It denotes the stability, dependability, predictability of the measuring instruments.

Test-retest Reliability

The test-retest method was used by the researcher to determine the reliability of the instrument. Test-retest reliability, according to Amin (2005), is the degree of consistency between an individual's scores on the same test taken over time. The temporal stability of an exam from one measurement session to the next is referred to as test-retest reliability (Drost, 2011). As a result, it describes the methodical investigation of the same individual's consistency, reproducibility, and agreement across two or more measurements made with the same instrument under the same circumstances. This suggests that if the test is given again later on, the results attained at that point will be the same or somewhat similar to the previous scores. The correlation between scores on the identical tests given at different time operationally defines its test-retest reliability. Test-retest helps us to understand how dependable our measurement tools are likely to be if put into wider use in research. In this study, the researcher administered the questionnaire to students and lecturers of the Faculty of medicine and biomedical sciences in the University of Yaoundé I, and after two weeks, the researcher administered again the same tool to the same population and the results were analysed with the help of chronbach's alpha and presented below.

In this study, the researcher employed the Chronbach's alpha statistical tool. Chronbach alpha was used in this study in order to assess the reliability, or better still the internal consistency of the set of scale or test items used in this study. According to Salkind (2000), internal consistency examines the reliability within a particular set of items. Internal consistency is evaluated by correlating performance on each of the items in a test or scale with total performance on the test or scale that takes the form of a correlation coefficient. Correlations are expressed as a numerical value, represented by lowercase r. For instance; the correlation test between test A and test B would be represented as $r_{test\ A}\ r\ t_{est\ B}$. In which case, the scores in test A and the scores in test B are correlated. The reliability coefficient or correlation coefficient ranges from -1.00 to +1.00. A value of 1.00 would be the most appropriate reliability, where there is no error in the measurement process. The reliability analysis showed the reliability of instruments for lecturers stood at 87% and that for students stood at 97%. This qualified the instruments to be used efficiently as highly reliable and

dependable. The researcher also carried out a pre-test study whose results were calculated by running the Cronbach's Alpha test using the reliability command in SPSS version 25.

Cronbach's Alpha is a measure of internal consistency, that is, it measures how closely a set of items are as a group. This statistic is used to help determine whether a collection of item consistently measure the same characteristic. Cronbach's alpha is a statistic commonly quoted by authors to demonstrate that tests and scales that have been constructed or adopted for research projects are fit for purpose. The statistic helped the researcher to evaluate the tool during the design phase before deploying the questionnaire fully. Alpha is frequently used for the development of scales intended to measure attitudes and affective constructs. SPSS version 21 was used to determine the internal consistency of the items by running the alpha Cronbach test. The alpha values are described as excellent if they fall between (0.93–0.94), strong (0.91–0.93), reliable (0.84–0.90), robust (0.81), fairly high (0.76–0.95), high (0.73–0.95), good (0.71–0.91), relatively high (0.70– 0.77), slightly low (0.68), reasonable (0.67–0.87), adequate (0.64–0.85), moderate (0.61– 0.65), satisfactory (0.58–0.97), acceptable (0.45–0.98), sufficient (0.45–0.96), not satisfactory (0.4–0.55) and low (0.11) (Kaber, 2017).

Reliability is the quality of a measurement procedure to provide repeatability and accuracy. Cronbach's alpha is a coefficient of reliability used to measure the internal consistency of a test or scale.

Table 9: Cronbach's Alpha reliability test in the case of students

Scales	Variable Concern	Cronbach's Alpha (r)	Number of items
A	University Human Resources (UHR)	0.779883	8
B	Learning Resources and Infrastructure (LRI)	0.676589	17
C	Student profile and Support Services (SPS)	0.808435	13
D	Teaching and learning (TL)	0.838977	12
E	University Assessment Practices (UAP)	0.675223	17

Source : The study

Table 10: Cronbach's Alpha reliability test in the case of lecturers

Scales	Variable	Cronbach's Alpha	Number of items
A	University Human Resources (UHR)	0.689453	16
B	Learning Resources and Infrastructure (LRI)	0. 756896	14
C	Student profile and Support Services (SPS)	0.638354	13
D	Teaching and learning (TL)	0.637024	12
E	University Assessment Practices (UAP)	0.602432	17

Source: The study

For internal reliability (consistency of the research instrument), reliability test for all the variables was done. Therefore, the overall reliability of the scale was found to be more than 0.5 which indicates the acceptability of the items.

Measurability of Variables

In this study, the variables are latent variables. The variables of interest are latent variables constructed from different questions asked to respondents on a 4-point Likert scale from strongly disagree=1, disagree=2, agree=3 to strongly agree=4. The latent variables were therefore contracted by summing their respective questions in other to capture these variables quantitatively.

Administration of the Instruments and Collection of Data

The questionnaires were translated into French to be easily understood by the English and French respondents. The Researcher applied and obtained a research authorization from the Dean which permitted him to carry out the research. The researcher used both online and face to face methods in administering the questionnaires. The online data collection was carried out by sending the sets of questionnaires to selected respondents through emails and WhatsApp groups. Secondly, to administer the questionnaires directly, the researcher presented the research authorisation to the various Deans and Head of Department (HODs). They gave access through a written note to meet any user on daily bases and have access to all data base upon presentation of the note to any

personnel in charge. It took the researcher three months and one week to meet strictly the identified students and lecturers for them to answer the questionnaire, to collect the online data and to access the data base of the departments. At the various departments some informants opted to fill the questionnaires on the spot while others decided to take them and fill when they are free and promised to return them the next day or later in the afternoon, which sometimes returned two weeks after. Some others preferred to be sent the questionnaires online. Since, many options were presented to the respondents, the return rate was 100%.

Statistical Analysis Techniques

Effective data analysis from the field was crucial to achieving the research goals, providing accurate answers to the research questions, assessing the conceptual model's validity and producing the best results. Both descriptive and inferential statistics were used to analyze the data. While the inferential statistics used Pearson's correlation coefficient to determine whether there was a relationship between the two variables, the descriptive statistics used means, medians, and standard deviations. Because it is based on the covariance method, Pearson's correlation coefficient quantifies the statistical relationship between the two variables. Trends and patterns in the responses were identified by comparing data from various documents with responses from various participants. Written accounts, direct quotes, interpretive reports, and excerpts were used to capture the reality on the ground. Ultimately, the study results were methodically presented and impartially discussed. Every piece of information was strictly interpreted in light of the study questions, and conclusions were derived from the data. Not to mention, suggestions for additional research areas and recommendations were made.

Restatement of Research Hypothesis

A hypothesis is the most specific statement of a research problem. It is an assertion of disparity. A hypothesis, as defined by Amin (2005), is a reasonable guess that is based on the evidence that is currently available and that the research aims to verify. It outlines the researcher's expectations for the relationships between the study research problem's variables.

General Hypothesis

There is a significant relationship between internal quality assurance strategies and students' academic performance in the University of Yaounde I

Specific Research Hypothesis

H_{o1}: There is no significant relationship between university human resources and students' academic performance in the University of Yaounde I

H_{o2}: There is no significant relationship between learning resources and infrastructure with students' academic performance in the University of Yaounde I

H_{o3}: There is no significant relationship between student profile and support service with students' academic performance in the University of Yaounde I

Ho4: There is no significant relationship between university pedagogic practices and students' academic performance in the University of Yaounde I

H_{o5}: There is no a significant relationship between university assessment practices and students' academic performance in the University of Yaounde I.

Variables of the Study

Kaur (2013) defines a variable as anything that is malleable and /or has multiple values. As the name suggests, a variable is something that changes. A variable is any entity that can take on different values across individuals and time. Amin (2005) defines a variable as anything that can take varying values. It is any factor that can change in a scientific investigation or experiment. Variables are characteristics that can take on more than one value and show variation. In this study, we distinguish two major variables; the independent variable (IV) and dependent variable (DV). The researcher also took note of extraneous variables. These variables are exploited in the many-to-many scenarios. This implies five independent variables to five dependent variables.

Independent Variables (IV)

An independent variable is also known as the predictor variable or explanatory variable. In any study, the independent variable is the consequent, and the dependent variable is the antecedent. It is the assumed or suspected cause of the variation in the dependent variable(s), and it is the one that influences the dependent variable. Consequently, it clarifies or accounts for the dependent variable's variation (s). University internal quality assurance strategies are the independent variable in this study.

Domains of Internal quality assurance strategies

- University human resources management
- Student learning resources and infrastructure
- Student profile and support services
- University pedagogic practices
- University assessment practices

Indicators of Internal quality assurance strategies

University Human Resources (UHR)

- Teacher recruitment procedures
- Lecturer retention strategies
- Staff incentives
- Support for staff development
- Staff grievance redrsessal procedures
- Staff workloads
- University management styles

Student Learning Resources and Infrastructure (SLRI)

- Provision of social services
- Maintenance of appropriate class sizes
- Counselling services

- Provision of learning facilities
- Provision of up to date infrastructural resources
- Provision of friendly learning spaces

Student Profile and Support Services (SPS)

- Student entry characteristics
- Student admission procedures
- Provision of scholarship and fellowship to students
- Student advisory services
- Inclusion strategies
- Student accommodation and feeding services

University Pedagogic Practices (Teaching-learning)

- Teaching strategies
- Teaching/teacher evaluation strategies
- Student/teacher evaluation strategies
- Employer and university interactions
- Staff continuous learning strategies
- Assessment strategies

University Assessment Practices (UAP)

- Staff knowledge/development in test development practices
- Test development practices
- Item banking and item use strategies
- Item random use strategies
- Item administration strategies
- Item scoring practices
- Feedback strategies

Dependent Variable

Students' Academic Performance

The dependent variable of this study is Students' academic performance. Anything that varies as a result of changes in the independent variable is called the dependent variable. It is the variable of interest and that which suffers with changes in the independent variable.

Indicators of Student's Academic Performance

- Grade point average (GPA)
- Promotion
- Graduation on time
- Certification
- Knowledge gain
- Employability
- Benefits to society

Extraneous Variables

Kaur (2013) defines an extraneous variable as any variable that may affect the research outcomes but have not been adequately considered in the study. Extraneous variables exist in all studies and can affect the measurement of the study variables and the relationship among these variables. In this study the researcher observed three possible extraneous variables as follows:

- Environmental factors
- Time factors
- Psycho-social factors

Table 11: Recapitulation of Hypothesis, Variables, Indicators and Modalities

Specific hypotheses	Variables	Indicators	Modalities	Statistical test
RH_1: There is a relationship between human resource management and	IV:	Teacher recruitment procedures,	4 -point Likert scale	Pearson's correlatio

students 'academic performance in the university of Yaoundé I	Human resources management	Lecturer retention strategies, Staff incentives, Support for staff development, Staff grievance redressal procedures, Staff workloads, University management styles.		n coefficient
	DV: Academic performance	GPA, Promotion, Graduation on time Certification, knowledge gain, Employment, Benefits to the society	4-point Likert scale	Pearson's correlatio n coefficient
RH_2: There is a relationship between learning resources & infrastructure and students; academic performance	IV: Learning resources/Inf rastructure	Up to date infrastructural resources, social services, appropriate class sizes, Counselling services, learning facilities, friendly learning spaces	4-point Likert scale	Pearson's correlatio n coefficient
	DV: academic performance	GPA, Promotion, Graduation on time , Certification, knowledge gain, Employability Benefits to society	4-point Likert scale	Pearson's correlatio n coefficient
RH_3: There is a relationship between student profile & support services and students' academic performance in the University of Yaoundé I.	IV: Student profile and	Student entry characteristics, Admission procedures,	4-point Likert scale	Pearson's correlatio n coefficient

	Support services	Provision of scholarship and fellowship to students, Student advisory services, Inclusion strategies, Student accommodation and feeding services.		
	DV: academic performance	GPA, Promotion, Graduation on time, Certification, knowledge gain, Employability Benefits to society.	4-point Likert scale	Pearson's correlation coefficient
RH_4: There is a relationship between pedagogic practices and students' academic performance	IV: Pedagogic practices	Teaching strategies, Lecturer/Lecturer evaluation strategies, Student/Lecturer Evaluation, Employer and university interactions, Staff continuous learning strategies, Assessment strategies	4-point Likert scale	Pearson's correlation coefficient
	DV: academic performance	GPA, Promotion, Graduation on time, Certification, knowledge gain, Employability, Benefits to society.	4-point Likert scale	Pearson's correlation coefficient
RH_5: There is a relationship between assessment practices and students'	IV: Assessment practices	Staff test development practices,	4-pont Likert scale	

academic performance in the university of Yaoundé I		Item banking and item use strategies, Item scoring strategies, Feedback strategies.	Pearson's correlation coefficient
	DV: students' academic performance	GPA, Promotion, Graduation on time, Certification, knowledge gain, Employability, Benefits to society.	Pearson's correlation coefficient

Where: R.H=Research Hypothesis, V= Variable, D.V=Dependent Variable (Source: *Researcher)*

Table 12: Presentation of the Explicit Information Table that Summarizes the Methodology of this Study

Area of study	The University of Yaounde 1	The Mfoundi Division	Centre Region
Research Design	Correlational research design		
Research Approach	Pragmatism Mixed method (inductive/deductive)	1 approach	
Study Population	All stakeholders of the University of Yaounde I.	……	
Target population	Students, teachers and administrators of the University of Yaounde I.	3 faculties	FSE FS FALSH

Accessible population	Students and teachers from FSE, FS, FALSH	
Sampling technique	Stratified sampling	1 techniques
Sample	Sampling chart	565
Data collection instruments	Questionnaire on Four-point Likert scale (for students) Questionnaire on Four-point Likert scale (for Lecturers)	2 tools
Sources of Data	Primary source Secondary data	
The validity of research instruments.	Face validity Content validity (CVI)	
Reliability	Test-retest (Chronbach's alpha)	
Administration of the instruments	University Campus	Face to face and online
Statistical Analysis Technique	Quantitative: Descriptive statistics, correlation test	
Statistical instruments used	SPSS (21.0)	

Source: *This study (2022)*

Table 12 present the summary of chapter three (methodology). It indicates the different steps, the various types selected that suite the type of research, and the respective authors and specialists who have written on these specific aspects of research. The researcher established this summary table in order to ease access to the details of this research work and enable vivid understanding of the methods employed.

Ethical Consideration

Ethical considerations in research are a set of guidelines that direct your research designs and procedures. These principles include voluntary participation, informed consent, anonymity, confidentiality, potential for harm and results communication (APA, 2018). In contemporary education studies, all researchers are expected to apply and respect ethical principles and guidelines when research involves human subjects (international commission for World Health Organisation (CIOMS 2002). This is because other researchers and those reviewing or supervising research would also find such helpful to themselves (Bailey, 1988). According to Gustafsson, Hermaren and Peterson (2005), areas of ethical concerns are lack of informed consent, plagued with inversion of privacy, deception and harm to participants. Ethical issues have to do with respect for lives, persons, human dignity, beneficence and justice. According to (Amin, 2005),

> Ethics refers to well based standards of right and wrong that prescribe what humans ought to do usually in terms of rights, obligations, benefits to society, fairness, or specific virtues… ethical standards support the virtue of honesty, compassion and loyalty and include standards relating to rights such as the right to life, the right to freedom from injury and the right to privacy (p. 28)

This takes place in four different stages of the research process; the choice of the topic, data collection, analysis, interpretation and thesis writing. In this study, the researcher ensured that ethical issues in these four parts are taken into consideration. For instance, in choosing the research topic, all cautionary steps were taken into consideration, in order to avoid stumbling on a topic that could harm or put both the university community and research participants in any jeopardy. In order to achieve this, an explorative study was conducted to test the suitability of the topic and to find out if it is sensitive to the scientific world or not.

At the level of data collection, the methodology, techniques and tools used were chosen with reasons, and further pre-tested during the explorative study before they are finally employed in the study. This was purposefully to avoid straying into research participant's privacy in one way or the other. While in the field, all participants were invited to participate in the exercise voluntarily without any form of coercion or inducement. Then the participants in each case were informed about the nature of the research and how the results would be used. This is usually known as informed consent and was done through a form. This form was presented in two parts, part A presented the information about the research work and B presented information on

participant's engagement on the whole exercise. The document was handed to participants and some verbal explanations were made after which they fixed day and place for the interview according to their convenience.

The research ensured that all communications with individuals outside the study were appropriately worded and maintained a courteous and professional relationship with each participant throughout the data collection phase. The researcher made sure that participants are anonymous and that any personal information they disclose is either not reported or cannot be used to identify them in any way in order to maintain confidentiality and protect participant identity. Every participant was granted the freedom to stop taking part in the study at any moment and without facing any repercussions. Again, throughout the research, the research at each step ensured that there was accurate reporting, presenting the raw data unchanged and without bias.

In conclusion, it is recalled that chapter three has presented the specific area of study, the type of research design, the population of the study, the research sample and sampling techniques the research philosophical standpoint and methods of data collection. The validity and reliability of the tools used for data collection was also discussed and examined. This chapter also presented the data analysis techniques. The data was analysed and presented in chapter four. The research hypotheses was restated, defined and explained. The independent variables and the indicators of the dependent variables were also itemized and presented in this chapter. In each fair research effort, ethical issues must be addressed as was the case in this chapter. This chapter gave the guidelines that make this work controllable, smooth and effective. The chapter ushers us into the fourth chapter of the study.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULTS

The purpose of this study was to investigate the internal quality assurance strategies of the University of Yaounde 1 and its effects on students' academic performance in the university. The internal quality assurance strategies were examined under university human resources, student learning resources and infrastructure, students' support services, university pedagogic and assessment practices. In this light, the following research questions were examined in the study:

- Is there a relationship between the university human resources and students' academic performance?
- What is the relationship between the learning resources and infrastructure of the university and students' academic performance?
- Do the students' support services affect students' academic performance in the University?
- Do the pedagogic practices (teaching/learning processes) of the university affect students' academic performance?
- What is the relationship between the assessment practices of the university and students' academic performance?

The analyses presented in this chapter were done using data collected through two different self-made questionnaire: one was for students and the other for lecturers of the Faculties of Arts, Letters and Social Sciences (FALSH), Education (FE) and Sciences (FS). The administration of the two sets of questionnaire was carried out by the researcher for the most part, and through assistance from class delegates as well through the use of online methods using Google documents. This chapter is made up of two parts: the first section is a presentation of the survey findings, descriptive statistics and frequencies for the participants (students and lecturers). The second part covers the presentation of the research findings and verification of hypotheses using t test and factor analysis. The data was analysed with the help of the Statistical Package for the Social Sciences (SPSS) version 21.0

Presentation of Demographic Information

Demographic information on students

Table 13: Number of valid respondents Summary of Item and variable characteristics used in the study for candidates

		Gender: F=Female, M=Male	Age Range: 18-22, 23-27, 28-32, 33-37, 38-42, 43-47, 48-52	Level: Degree, Master1, Master2, PhD 1, PhD 2, PhD 3	Department: MED, EDS, PhDCEV, EFE,	Faculty: FE, IDE, FS, FALHS, DID,
N	Valid	381	381	381	381	381
	Missing	0	0	0	0	0

Source: This Study (2022)

The table above shows the number of valid and missing responses as gathered from the demographic data of student respondents. All the 381 students responded to each item of the questionnaire and the result is as shown above that none was missing.

Table 14: Distribution of Respondents According to sex (students)

Variable		Frequency	Percent	Cumulative percent
	F	179	46.0	46.0
	M	202	53.0	53.0
	Total	381	100.0	100.0

Source: This Study (2022)

This table shows that out of the 381 respondents 179 were female, giving 46 percent. The remaining 202 were male and gave 53 percent .this indicating that there were more male students than female students.

Table 15: Frequency table on Age range

Variable	Frequency	Percent	Cumulative Percent
A	28	7.0	7.0
B	129	33.0	33.0
C	88	23.1	23.1
D	60	15.0	15.0
E	61	16.0	16.0
F	8	2.1	2.1
G	7	1.0	1.0
Total	381	100.0	100.0

Source: This Study (2022)

The table shows that 28 (07%) students respondents fall between the ages 18-22, 129 (33%) student respondents fall between the ages 23-27, 88 (23.1%) student respondents fall between the ages 28-32, 60(15%) fall between the ages 33-37. 61(16%) student respondents fall between the ages 38-42. 8 (02.1%) student respondent fall between the ages 43-47 and 7(01.0%) respondents fall between the ages 48-52. Therefore, majority of respondents fall between the ages 23-27.

Table 16: Distribution of respondents according to class or level of study

Variable	Frequency	Percent	Cumulative Percent
Degree	21	5.5	5.5
Master1	103	27.0	27.0
Master2	111	29.0	29.0
PhD 1	88	23.1	23.1

PhD 2	15	3.9	3.9
PhD 3	43	11.3	11.3
Total	381	100.0	100.0

Source: This Study (2022)

The table Shows that 21 (05.5%) students respondents were undergraduates, 103(27%) student respondents were doing Masters 1, 111 (29.0%) student respondents were doing Masters 2, 88(23.1%) were doing PhD 1, 15 (03.9%) student respondents were doing PhD 2. 43 (11.3%) student respondent are in PhD 3 .

Frequency table for the various departments

Table 17: Distribution of student respondents according to departments

Variable	Frequency	Percent	Cumulative Percent
CEV	99	25.0	25.0
DID	46	12.1	12.1
EDE	1	.0	.0
EDS	64	16.0	16.0
EFE	31	8.0	8.0
GEO	1	.0	.0
HIS	4	1.0	1.0
IDE	29	7.0	7.0
INFO	20	4.0	4.0
MED	83	21.0	21.0
PHY	2	.0	.0

SOC	1	.0	.0
Total	381	100.0	100.0

Source: This Study (2022)

The table shows the various departments in the faculties in question. Out of a total of 381 students who participated, there were 99(25%) respondents from the department of CEV (Curriculum and Evaluation), 1(0.001) from the department of COMS (Computer Science, 46 (12.1%) from the department of DID (Subject Didactics), 1 (0.001%) EDE, 64 (16%) from EDS (Special Needs Education), 31 (08%) from EFE(department of Fundamental Education), 1 (0.001%) from GEO (Geography), 04 (01%) from HIS (History), IDE, 20 (04%) for INFO ('informatique' or Computer Science), 83 (21%) from MED (Educational Management), PHY (Physics), 01 (0.001%) from SOC (department of Sociology).

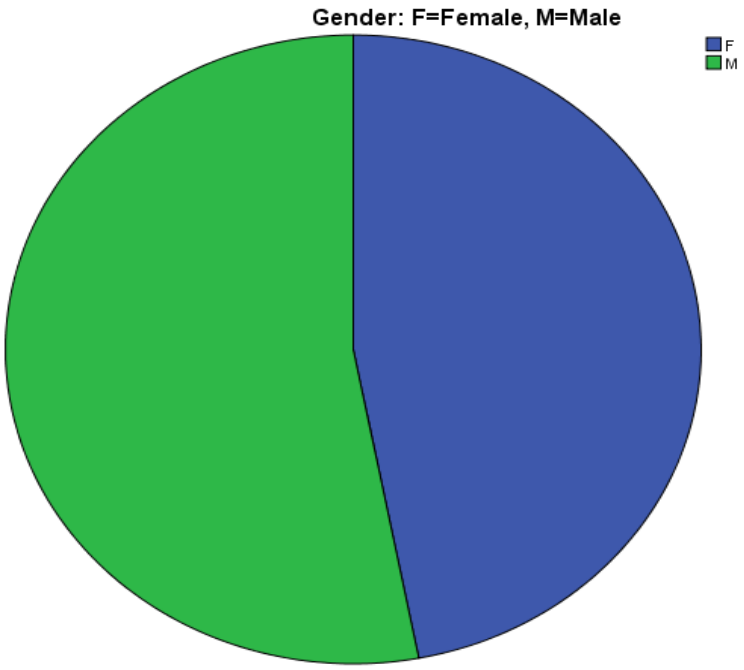
Table 18: Distribution of student respondents according faculties

Variable	Frequency	Percent	cumulative Percent
FALSH	133	34.9	34.9
FE	109	28.6	63.6
FS	139	36.5	100
Total	381	100.0	100

Source: This Study (2022)

The table 18 shows the final distribution of respondents per faculty. It shows that majority of respondents came from the faculty of education with a percentage of 79% while, the second was FALSH with participation rate of 15.5% and the least was the faculty of Science with a percentage of 5%.

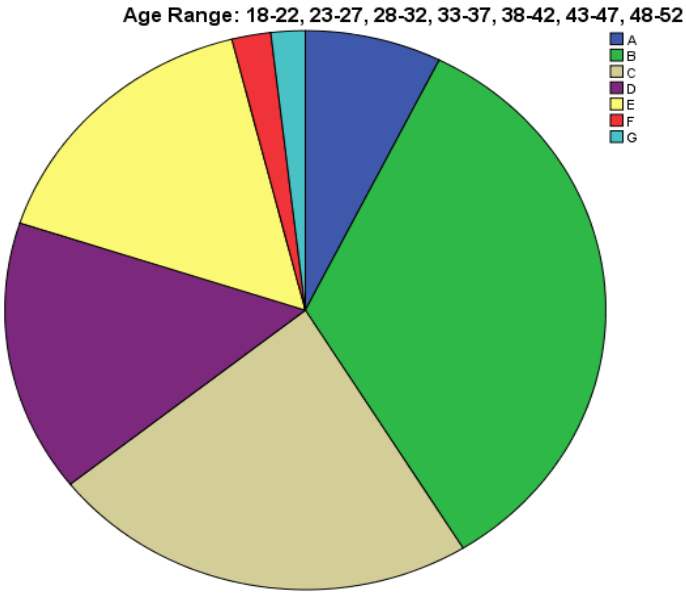
Figure 5: Pie cart on showing the distribution of students by sex



Source: This Study (2022)

The figure shows a pie chart differentiated the percentage of participation for male and female students.

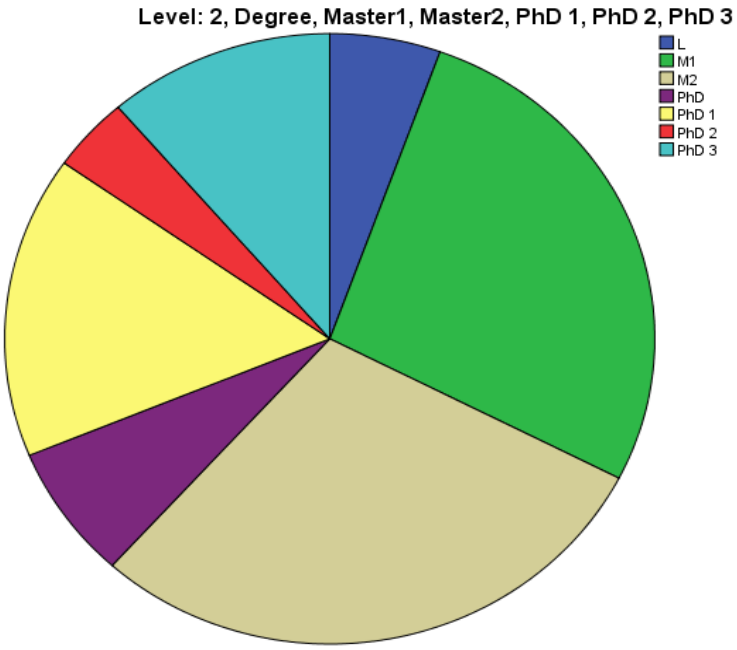
Figure 6: A Pie chart showing the distribution of students by age ranges



Source: This Study (2022)

The pie chart shows the distribution of the various age groups of student respondents. From the distribution, majority of respondents came from age group B(23-27) with 33% represented by the green colour, the second is from the group C (28-32) with 23.1% represented by the colour white, the third came from age group E (38-42) with 16% represented by the yellow colour, the fourth age group was D (33-37) represented by the purple colour, the next group was A (18-22) with 7% represented by grey, F(43-47) with 2.1% represented by the aquamarine colour, and lastly there was the group G (48-52) with 1% represented by red.

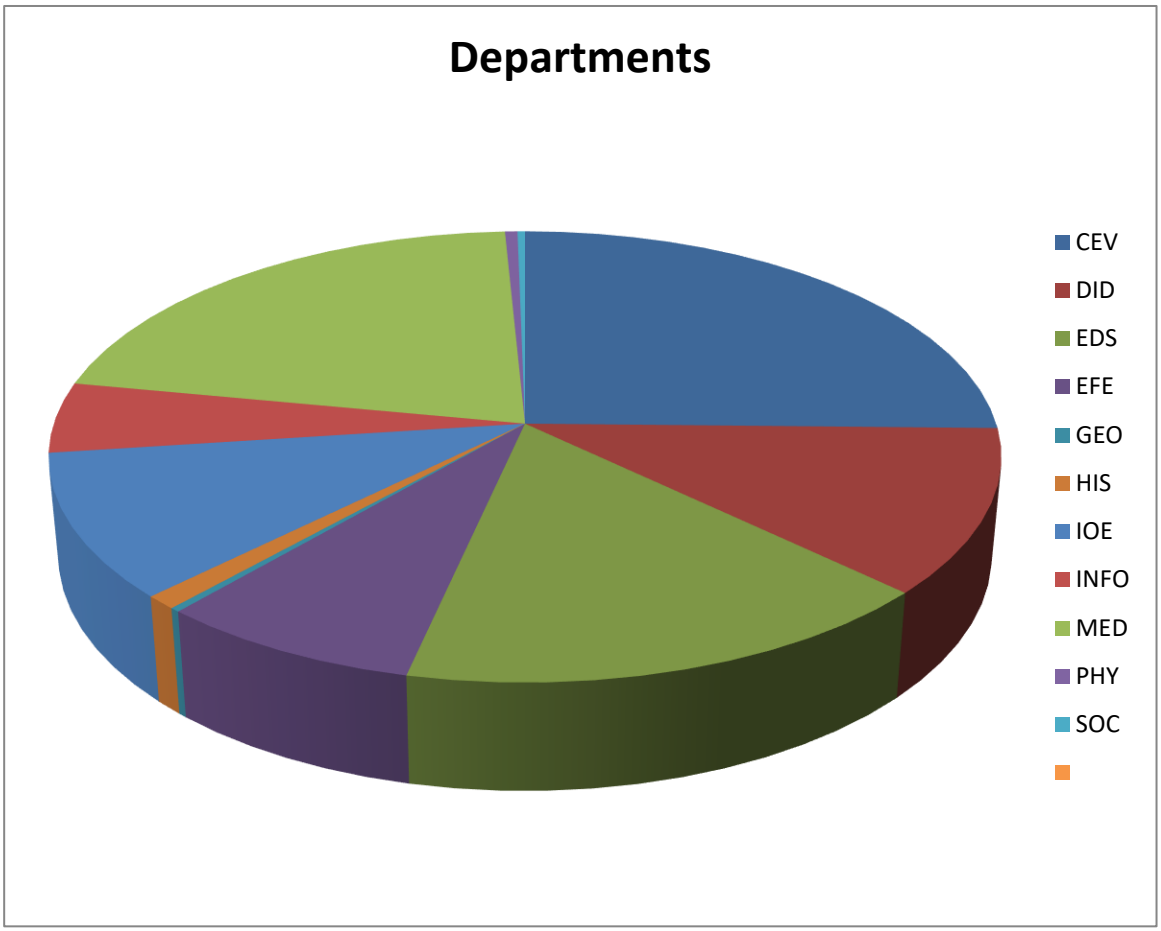
Figure 7: A pie chart showing students' academic levels of study



Source: This Study (2022)

This pie chart also shows the distribution of the academic levels of the student respondents. The highest participation rate in the following from highest to the lowest; Masters 2 with 29%, Masters 1 with 27%, PhD 1 with 23.1%, PhD 3 with 11.3%, undergraduates with 05.5% and finally PhD 2 with 3.3%.

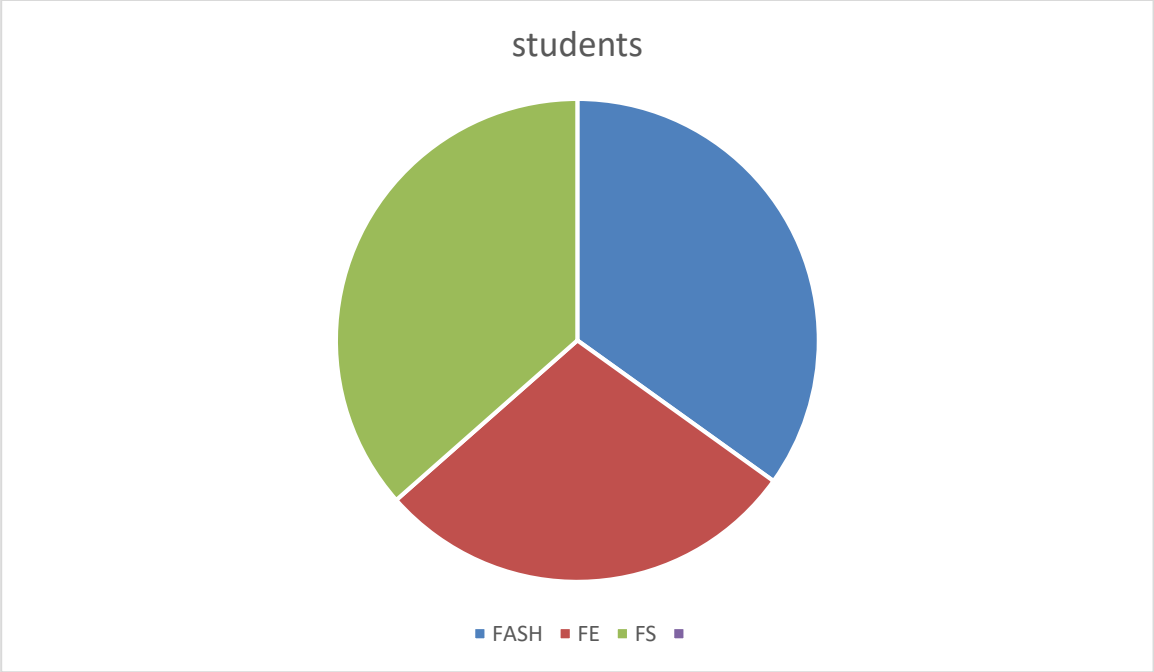
Figure 8: A pie chart showing the various departments of student respondents



Source: This Study (2022)

The figure shows the level of student participation based on their various departments. The pie charts shows that the highest participation rate came from the following departments in descending order: Curriculum and Evaluation (CEV) with 26% represented by the colour blue, Educational Management (MED) with 21.8% represented by yellow, Special Needs Education(EDS) with16.8% represented by the colour red, Subject Didactics (DID) with 12.1% represented by grey , Fundamental Education (EFE) with 8% represented by the red colour, Guidance and Counselling (IOE) with 7.5% , Computer Science (Info) with 5.2% , Physics (PHY) with a percentage of 0.5% and Geography (GEO) and Sociology (SOC) with same rate of 0.3% each.

Figure 9: A pie chart showing the various faculties of student respondents



Source: This Study (2022)

Figure 9 shows a pie chart that highlights the distribution of student respondents by their faculty. Here majority of respondents came from the faculty of Arts, Letters and the Humanities (FALSH) with 34.9% rate while 28.6% came from the Faculty of Education (FE) and 36.5% from the Faculty of Science (FS).

Demographic information for lecturers

Table 19: Distribution of Respondents According to sex (Lecturers)

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	65	33.0	33.0	33.0
Male	119	64.7	64.7	100.0
Total	184	100.0	100.0	

Source: This Study (2022)

Table 19 shows the distribution of lecturers in relation to their gender and indicates that 64.7% of the respondents were male lecturers while 33% were female.

Table 20: Distribution of Respondents According to rank (Lecturers)

	Frequency	Percent	cumulative Percent
Assistant lecturer	45	24.5	24.5
Lecturer	52	28.3	52.8
Associate Professor	46	25	77.7
Professor	41	22.3	100
Total	184	100.0	100.0

Source: This Study (2022)

Table 21: Frequency distribution of the ages of lecturers

Age	Frequency	Percent	Cumulative Percent
40	22	12.0	12.0
46	23	12.5	24.5
48	25	13.6	35.0
49	34	18.5	43.0
50	26	14.1	57.1
54	25	13.6	70.2
55	13	7.1	83.1
56	10	5.4	96.8
57	06	3.2	100.0
Total	184	100.0	

Table 21 shows the frequency distribution of the lecturers in terms of their ages. It shows that 5% of the lecturers were ages 40, 10% of them were 46 years, 10% were 48 years old, 15% were

49 years, 25% were 50 years of age, 19% were 54 years of age, 5% were 55 years old, 5% were 56 years old and 5% were about 57 years of age.

Table 22: Frequency distribution showing the various faculties of university lecturers

Faculty	Frequency	Percent	Cumulative Percent
FALHS	9	45.0	45.0
FE	84	25.0	70.0
FS	91	30.0	100.0
Total	184	100.0	

Table 22 shows the various faculties of the respondents. It indicates that 45% of the lecturers came from the Faculty of Arts, Letters and Social Sciences, 25% came from the Faculty of Education while 30% came from the Faculty of Science.

Table 23: Frequency distribution showing the lecturers' teaching experience

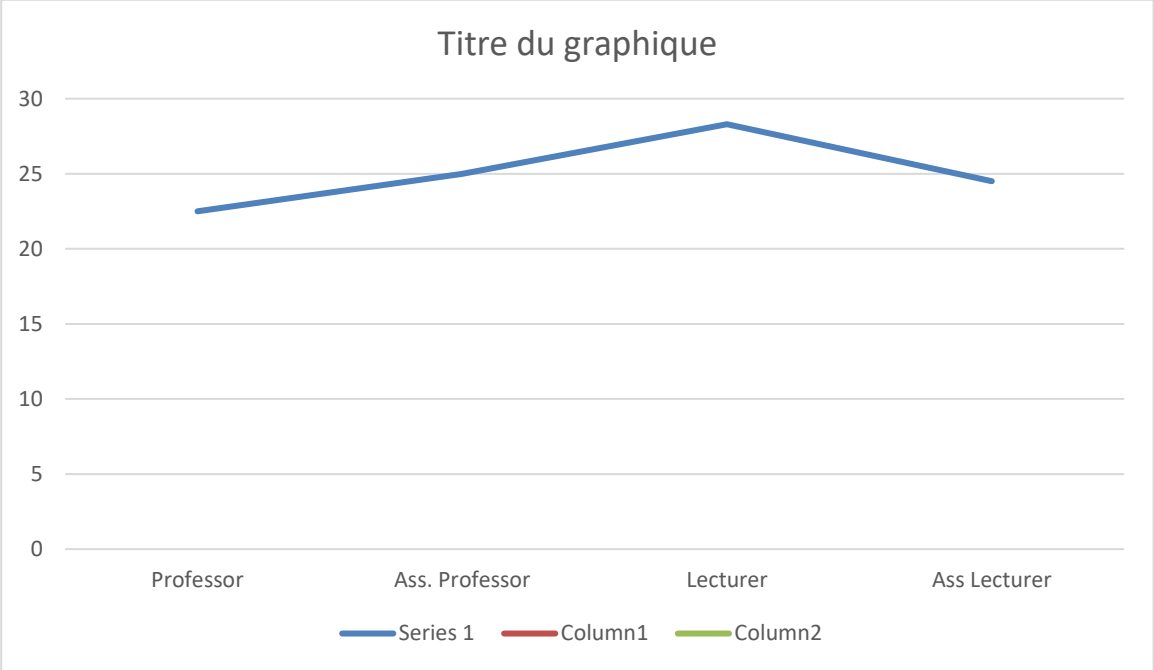
Exp.	Frequency	Percent	cumulative %
3	11	6.0	6.0
5	21	11.4	17.0
6	13	7.1	24.1
8	13	7.1	31.2
9	12	6.5	37.7
11	21	11.4	49.1
13	12	6.5	55.6
14	11	6.0	61.6
15	21	11.4	73.0
16	11	6.0	79.0

17	13	7.1		86.1
18	12		6.5	92.6
19	13	7.4		100
Total	184		100.0	100.0

Source: The study

Table 23 shows the distribution of the experiences of the lecturers in terms of years in teaching. The least experienced lecturer had put in 3 years, while there was a lecturer who has taught for 19 years.

Figure 10: A chart (xy scatter) showing lecturers by rank

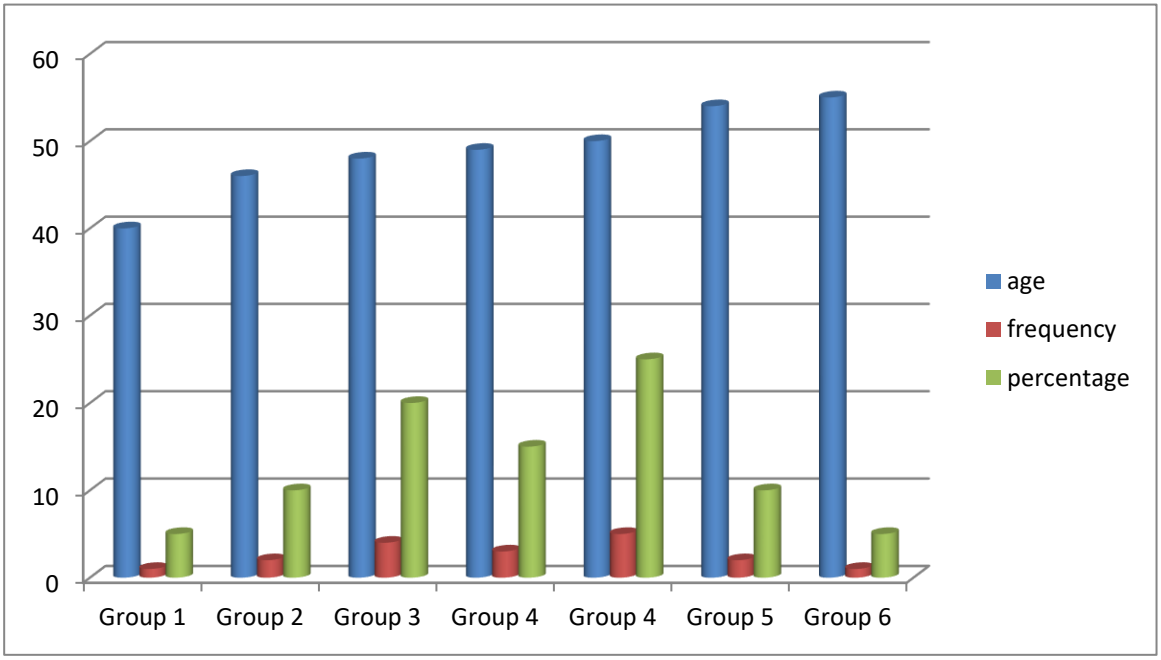


Rank : A=Assistant Lecturer, B=Lecturer, C=Associate Professor, D=Professor

Source: This Study (2022)

Figure 11 shows the distribution of lecturers' participation by rank. There were 24,5% Assistant Lecturers, 28.3% Lecturers, 25% Associate Lecturers and 22.5% Professor.

Figure 12: A bar chart on the distribution of the ages lecturers



Source: This Study (2022)

Figure 12 shows the distribution of lecturers by age. It shows that 5% of the lecturers were 40 years old, 10% were about 46 years old, 20% were about 48 years old, 15% were about 49 years old, 25% were about 50 years old, 10% were about 54 years and 5% were about 55 years.

Figure 13: A line chart showing the frequency distribution of respondents by faculty

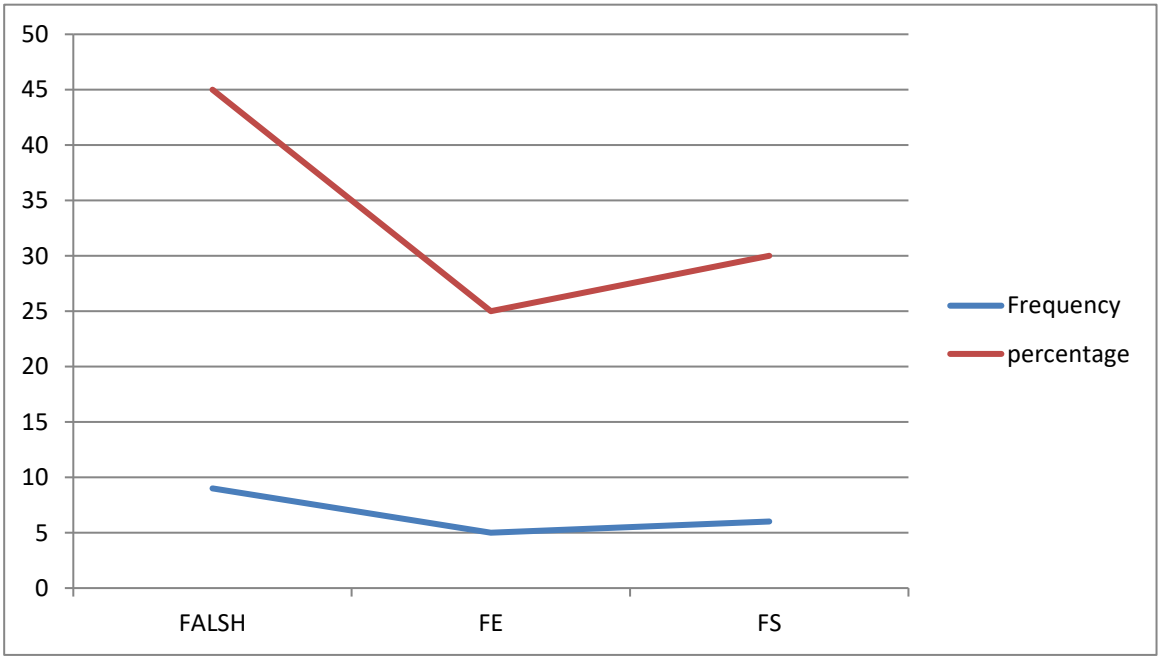
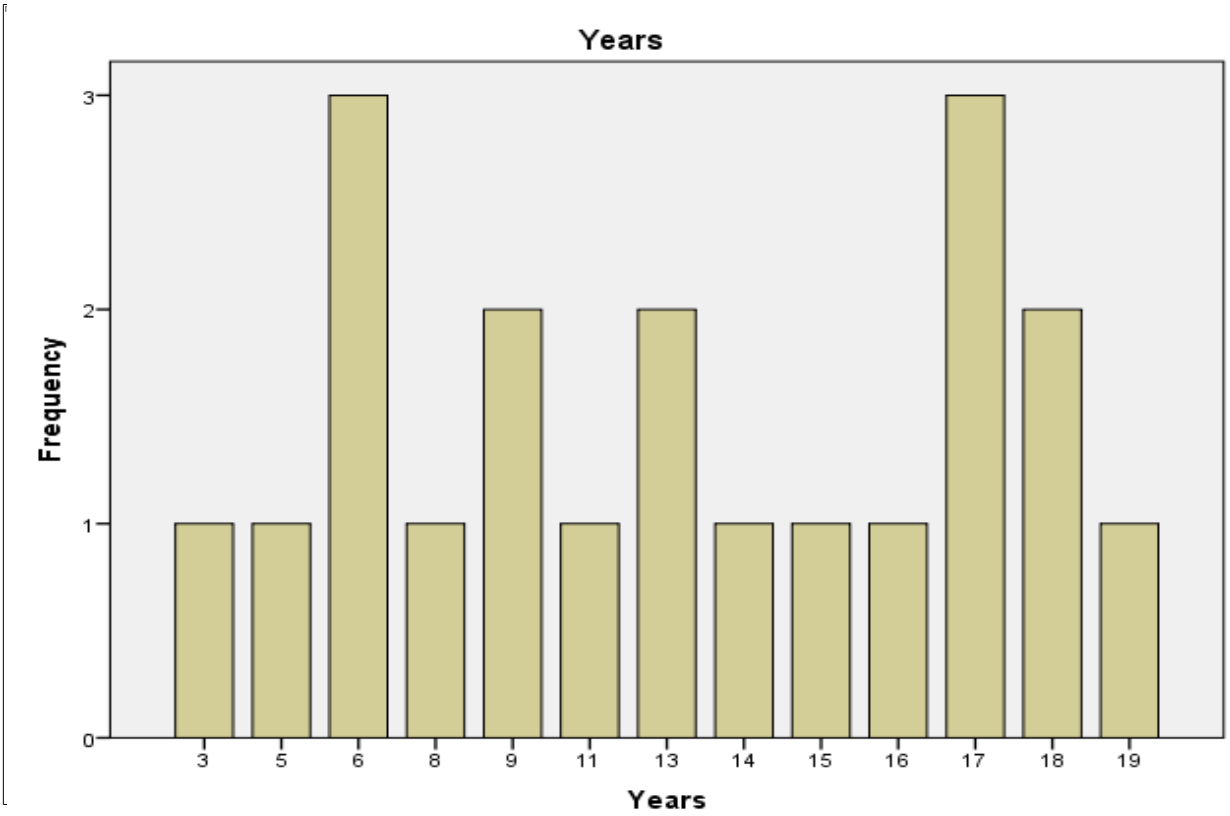


Figure 13 shows the distribution of lecturers by faculty. More lecturers who participated in the study came from the Faculty of Arts, Letters and the Humanities (FALSH) with 45% rate, Faculty of Science (FE) came second with 30% and Faculty of Education (FE).

Figure 14: A pie chart showing the distribution of lecturers by their experience



Source: This Study (2022)

Table 24: Mean and standard deviation on university human resources

Descriptive Statistics

Variable	Mean	Std. Deviation	N
UHR	22.00	2.000	381
SAP	24.00	4.000	381

Source: This Study (2022)

Table 24 shows the descriptive statistics whereby the mean shows the average level observed in the data on the first independent variable (IV), university human resources (UHR) and the

dependent variable (DV), students' academic performance (SAP). The standard (Std) deviation describes the variance or how the data observed in the two variables is distributed around its mean

Table 25: Frequency on responses on University human resources shows the frequency distribution of student responses on university human resources (UHR).

Response	Frequency	Percent	Cumulative Percent
11	1	0.3	0.3
13	1	0.3	0.3
15	5	1.3	1.3
16	2	0.5	0.5
17	1	0.3	0.3
18	9	2.4	2.4
19	4	1.0	1.0
20	45	11.8	11.8
21	58	15.2	15.2
22	63	16.5	16.5
23	73	19.2	19.2
24	56	14.7	14.7
25	50	13.1	13.1
26	8	2.1	2.1
28	5	1.3	1.3
Total	381	100.0	100.0

Table 26: Mean and standard deviation on learning resources and infrastructure and the students' academic performance

Descriptive Statistics

Variable	Mean	Std. Deviation	N
LRI	39.00	3.000	381
SAP	24.00	4.000	381

Source: This Study (2022)

Table 26, shows the mean and the standard distribution between the learning resources and infrastructure, the independent variable and the student Academic performance, the dependent variable.

Table 27: Frequency on responses on learning resources and infrastructure (LRI)

Response	Frequency	Percent	cumulative Percent
26	2	0.5	0.5
28	1	0.3	0.3
29	1	0.3	0.3
32	1	0.3	0.3
33	1	0.3	0.3
34	5	1.3	1.3
35	19	5.0	5.0
36	28	7.1	7.1
37	58	15.0	15.0
38	15	4.0	4.0
39	43	11.3	11.3

40	56	15	15
41	72	18.9	18.9
42	11	2.9	2.9
43	30	7.9	7.9
44	1	0.3	0.3
45	3	0.8	0.8
46	19	5.0	5.0
48	2	0.5	0.5
49	9	2.4	2.4
50	1	0.3	0.3
56	3	0.8	0.8
Total	381	100.0	100.0

Source: This Study (2022)

Table 27, shows a distribution of the responses on the learning resources and infrastructure as well the percentages.

Table 28: Mean and standard deviation on student profile and support services

Descriptive Statistics

Variable	Mean	Std. Deviation	N
SPS	40.00	3.000	381
SAP	24.00	4.000	381

Source: This Study (2022)

Table 29: Frequency on responses on student profile and support services (SPS)

Response	Frequency	Percent	cumulative Percent
20	1	0.3	0.3
21	1	0.3	0.3
24	1	0.3	0.3
25	2	0.5	0.5
26	2	0.5	0.5
27	3	0.7	0.7
28	1	0.3	0.3
29	1	0.3	0.3
30	6	1.6	1.6
31	2	0.5	0.5
32	5	1.3	1.3
33	4	1.0	1.0
34	4	1.0	1.0
35	1	0.3	0.3
36	7	1.8	1.8
37	48	12.6	12.6
38	19	5.0	5.0
39	45	11.8	11.8
40	84	22.0	22.0

41	46	12.1	12.1
42	19	5.0	5.0
43	55	14.4	14.4
44	6	1.6	1.6
45	3	0.7	0.7
46	5	1.3	1.3
47	1	0.3	0.3
48	1	0.3	0.3
51	1	0.3	0.3
52	3	0.7	0.7
53	4	1.0	1.0
Total	381	100.0	100.0

Source: This Study (2022)

Table 29 shows the frequency distribution of the responses on student profile and support services.

Table 30: Mean and standard deviation on teaching and learning

Descriptive Statistics

Variable	Mean	Std. Deviation	N
TL	42.00	2.000	381
SAP	24.00	4.000	381

Source: This Study (2022)

Table 31: Frequency on responses on teaching and learning (pedagogic practices)

Response	Frequency	Percent	cumulative Percent
12	4	1.0	1.0
13	4	1.0	1.0
20	1	0.3	0.3
21	19	4.0	4.0
22	5	1.0	1.0
23	23	6.0	6.0
24	17	4.0	4.0
25	7	1.0	1.0
26	6	1.0	1.0
28	4	1.0	1.0
30	4	1.0	1.0
32	8	2.1	2.1
33	2	0.5	0.5
34	8	2.1	2.1
35	2	0.5	0.5
36	4	1.0	1.0
37	2	0.5	0.5
38	5	1.0	1.0
39	17	4.0	4.0

40	30	7.0	7.0
41	13	3.0	3.0
42	45	11.0	11.0
43	62	16.0	16.0
44	36	9.0	9.0
45	38	9.0	9.0
46	13	3.0	3.0
48	1	0.3	0.3
50	1	0.3	0.3
Total	381	100.0	100.0

Source: This Study (2022)

Table 31 shows the frequency distribution of the responses on teaching and learning practices of the university.

Table 32: Mean and standard deviation on University assessment practices

Descriptive Statistics

Variable	Mean	Std. Deviation	N
UAP	49.00	5.000	381
SAP	24.00	4.000	381

Source: This Study (2022)

Table 33: Frequency on responses on university assessment practices

Responses	Frequency	Percent	Cumulative Percent
12	4	1.0	1.0
13	4	1.0	1.0
20	1	0.3	0.5
21	18	4.0	4.0
22	5	1.0	1.0
23	19	4.0	4.0
24	14	3.0	3.0
25	2	0.5	0.5
26	4	1.0	1.0
28	4	1.0	1.0
30	4	1.0	1.0
32	7	1.0	1.0
33	1	0.3	0.3
34	4	1.0	1.0
36	2	0.5	0.5
37	2	0.5	0.5
38	5	1.0	1.0
39	16	4.0	4.0
40	16	4.0	4.0

42	3	0.7	0.7
43	2	0.5	0.7
44	14	3.0	3.0
45	32	8.0	8.0
46	22	5.0	5.0
48	23	6.0	6.0
49	44	11.0	11.0
50	20	5.0	5.0
51	14	3.0	3.0
55	49	12.0	12.0
56	14	3.0	3.0
57	12	3.0	3.0
Total	381	100.0	100.0

Source: This Study (2022)

Table 33 shows the frequency distribution of the responses on the assessment practices of the university.

Table 34: Summary statistics of student respondents

Statistics

Variable		UHR	LRI	SPS	TL	UAP	SAP
N	Valid	381	381	381	381	381	381
	Missing	0	0	0	0	0	0

Inferential statistics per variable of the study

Correlation of data collected from student respondents

Table 35: Correlation outcome of UHR vs. SAP

Correlations

Variable		UHR	SAP
UHR	Pearson Correlation	1	.025
	Sig. (2-tailed)		.000
	N	381	381
SAP	Pearson Correlation	.025	1
	Sig. (2-tailed)	.000	
	N	381	381

*. Correlation is significant at the 0.000 level (2-tailed).

Source: This Study (2022)

Table 35 shows that the significance level is 0.000, therefore the null hypothesis is upheld and the alternative hypothesis is rejected. This means that there is no relationship between the university human resources and students' academic performance.

Table 36: Correlation outcome of LRI vs. SAP

Correlations

Variable		LRI	SAP
LRI	Pearson Correlation	1	.000*
	Sig. (2-tailed)		.035
	N	381	381
SAP	Pearson Correlation	.000*	1

	Sig. (2-tailed)	.035	
	N	381	381

*. Correlation is significant at the 0.05 level (2-tailed).

Source: This Study (2022)

Table 36 describes the relationship between learning resources and infrastructure with students' academic performance. It shows that there is a significant relationship between the two variables. This means that the null hypothesis have been rejected while the alternative hypothesis upheld.

Table 37: Correlation outcome of SPS vs. SAP

Correlations

Variable		SPS	SAP
	Pearson Correlation	1	.000*
SPS	Sig. (2-tailed)		.016
	N	381	381
	Pearson Correlation	.000*	1
SAP	Sig. (2-tailed)	.016	
	N	381	381

*. Correlation is significant at the 0.05 level (2-tailed).

Source: This Study (2022)

Table 37 shows the relationship between the student profile and support services (independent variable) and student academic performance (dependent variable). The significant level is 0.16 (2 tailed). This implies that there is significant relation between the independent variable and the dependent variable.

Table 36: Correlation outcome of TL vs. SAP

Correlations

Variable		TL	SAP
TL	Pearson Correlation	1	.000**
	Sig. (2-tailed)		.000
	N	381	381
SAP	Pearson Correlation	.000**	1
	Sig. (2-tailed)	.000	
	N	381	381

**. Correlation is significant at the 0.01 level (2-tailed).

Source: This Study (2022)

Table 38 shows the correlations between the teaching and learning (pedagogic) practices and students' academic performance. It indicates a significant relationship between teaching and learning practices and students' academic performance. This implies that the alternative hypothesis is upheld.

Table 37: Correlation outcome of UAP vs. SAP

Correlations

Variable		UAP	SAP
UAP	Pearson Correlation	1	.000**
	Sig. (2-tailed)		.004
	N	381	381
SAP	Pearson Correlation	.000**	1
	Sig. (2-tailed)	.004	
	N	381	381

**. Correlation is significant at the 0.01 level (2-tailed).

Source: This Study (2022)

Table 38 describes the correlation between university assessment practices (IV) and students' academic performance (DV). It shows that correlation is significant at the 0.01 level (2 tailed). This means that there is a significant relation between the two.

Presentation of Descriptive Statistics per variable for lecturers

Table 8: Frequency distribution on university human resources

	Frequency	Percent	Cummulative Percent
16	1	5.0	5.0
18	1	5.0	5.0
21	1	5.0	5.0
22	1	5.0	5.0
26	1	5.0	5.0
27	1	5.0	5.0

28	1	5.0	5.0
29	3	15.0	15.0
30	2	10.0	10.0
31	1	5.0	5.0
32	1	5.0	5.0
33	1	5.0	5.0
34	1	5.0	5.0
35	1	5.0	5.0
36	1	5.0	5.0
38	2	10.0	10.0
Total	20	100.0	100.0

Table 40, shows the frequency distribution of lecturers responses on university human resources.

Table 9: Frequency on lecturers responses on the learning resources and infrastructure

	Frequency	Percent	Cumulative Percent
16	1	5.0	5.0
17	1	5.0	5.0
23	2	10.0	10.0
24	1	5.0	5.0
25	1	5.0	5.0
26	1	5.0	5.0
27	1	5.0	5.0

28	2	10.0	10.0
33	2	10.0	10.0
34	2	10.0	10.0
36	1	5.0	5.0
38	3	15.0	15.0
40	1	5.0	5.0
42	1	5.0	5.0
Total	20	100.0	100.0

Source: This Study (2022)

Table 40 shows the frequency of lecturers' responses on the university learning resources and infrastructure.

Table 10: Frequency on lecturers' responses on the student profile and support services

	Frequency	Percent	Cumulative Percent
13	11	6.0	6.0
15	15	8.2	14.2
16	14	7.6	21.8
19	13	7.1	28.9
21	12	6.5	35.4
23	11	6.0	41.4
31	16	8.7	50.1
32	11	6.0	56.1
33	11	6.0	62.1

34	12	6.5	68.6
35	11	6.0	74.6
36	12	6.5	81.1
37	11	6.0	87.1
38	12	6.5	93.3
40	13	6.7	100.0
Total	184	100.0	

Source: This Study (2022)

Table 42 shows the frequency distribution of the lecturers' responses on student profile and support services.

Table 411: Frequency on lecturers' responses on the teaching and learning practices

	Frequency	Percent	Cumulative Percent
21	21	10.4	11.4
22	11	6.0	17.4
23	31	14.8	34.2
24	11	5.0	40.2
28	21	10.4	50.6
29	11	5.0	56.6
30	12	6.5	64.1
31	21	10.4	75.0
32	11	5.0	81.5
33	11	5.0	86.5

34	13	7.0	91.0
35	12	6.5	80.0
36	11	5.0	85.0
37	14	7.6	90.0
38	11	5.0	94.0
40	10	5.4	100.0
Total	184	100.0	

Table 43 illustrates the frequency distribution of teachers' responses on the teaching and learning processes of the university.

Table 12: Frequency on lecturers' responses on the university assessment practices

UAP

	Frequency	Percent	Cumulative Percent
23	20	5.0	5.0
25	10	5.0	10.0
30	22	10.0	20.0
31	12	10.0	30.0
32	24	20.0	50.0
34	13	15.0	65.0
35	21	5.0	70.0
36	13	15.0	85.0
38	21	5.0	90.0
39	21	5.0	95.0

	40	11	5.0	100.0
	Total	184	100.0	

Table 44, shows the frequency distribution of teachers' responses on the university assessment practices.

Table 13: Student academic performance

		Frequency	Percent	Cumulative Percent	
	16	21	11.4	11.4	
	19	10	5.4	16.8	
	20	14	7.6	24.4	
	21	11	5.9		30.3
	22	21	11.4	41.7	
	26	12	6.5	48.2	
	30	21	11.4	59.6	
.4	31	11	5.9	65.5	
	32	12	6.5	72	
	33	12	6.5	78.5	
	34	13	7.1	85.6	
	37	11	5.9	91.5	
	38	12	6.5	98.4	
	40	03	1.6	100.0	
	Total	184	100.0		

Correlation of data collected from lecturers respondents

Table 14: Correlations between university human resources and student academic performance

Correlations

		UHR	SAP
UHR	Pearson Correlation	1	.000
	Sig. (2-tailed)		.000
	N	184	184
SAP	Pearson Correlation	.000	1
	Sig. (2-tailed)	.000	
	N	184	184

Source: This Study (2022)

Table 45 explains the correlation between university human resources (IV) and students' academic performance (DV). It shows a significance of 0.000 which means that there is no correlation between the IV and the DV.

Table 15: Correlations between learning resources/infrastructure and students' academic performance

Correlations

		LRI	SAP
LRI	Pearson Correlation	1	.000**
	Sig. (2-tailed)		.009
	N	184	184
SAP	Pearson Correlation	.000**	1

	Sig. (2-tailed)	.009	
	N	184	184

**. Correlation is significant at the 0.01 level (2-tailed).

Source: This Study (2022)

Table 46 shows the correlation between the learning resources and infrastructure (IV) and students' academic performance (DV). It indicates that there is significant correlation between the IV and the DV.

Table 47: Correlations between students' profile/support services and students' academic performance

Correlations

		SPS	SAP
SPS	Pearson Correlation	1	.000*
	Sig. (2-tailed)		.040
	N	184	184
SAP	Pearson Correlation	.000*	1
	Sig. (2-tailed)	.040	
	N	184	184

*. Correlation is significant at the 0.05 level (2-tailed).

Source: This Study (2022)

Table 47 depicts the correlation between the students' profile, support services (IV) and students' academic performance (DV). It shows that there is a significant correlation between the IV and the DV.

Table 48: Correlations between university assessment practices and students' academic performance

Correlations

		UAP	SAP
UAP	Pearson Correlation	1	.000**
	Sig. (2-tailed)		.000
	N	184	184
SAP	Pearson Correlation	.000**	1
	Sig. (2-tailed)	.000	
	N	184	184

**. Correlation is significant at the 0.01 level (2-tailed).

Source: This Study (2022)

Table 48 highlights the correlation between the university assessment practices (IV) and students' academic performance (DV). It therefore, shows that there is a significant correlation between the IV and the DV at the 0.01 level (2 tailed).

Table 49: Summary

Correlations

		UHR	LRI	SPS	TL	UAP	SAP
UHR	Pearson Correlation	1	.000*	.047	.000	-.017	.000
	Sig. (2-tailed)		.020	.000	.000	.000	.000
	N	184	184	184	184	184	184
LRI	Pearson Correlation	.000*	1	.000	.000*	.000	.000**

	Sig. (2-tailed)	.020		.000	.014	.000	.009
	N	184	184	184	184	184	184
	Pearson Correlation	.047	.000	1	.000	.000	.000*
SPS	Sig. (2-tailed)	.000	.000		.000	.093	.040
	N	184	184	184	184	184	184
	Pearson Correlation	.000	.000*	.000	1	-.069	.000
TL	Sig. (2-tailed)	.000	.014	.000		.000	.000
	N	184	184	184	184	184	184
	Pearson Correlation	-.017	.000	.000	-.069	1	.000**
UAP	Sig. (2-tailed)	.000	.000	.093	.000		.000
	N	184	184	184	184	184	184
	Pearson Correlation	.000	.000**	.000*	.000	.000**	1
SAP	Sig. (2-tailed)	.000	.009	.040	.000	.000	
	N	184	184	184	184	184	184

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: This Study (2022)

Table 49 shows the summary of the correlations between the independent variables and the dependent variable. It shows that there is no significant correlation between university human resources (UHR) and students' academic performance. But the results show that learning resources and infrastructure (SPI) has a significant correlation with students' academic performance at0.01 level. Again the result revealed that there is a significant relationship between student profile and support services (SPS) at 0.05 level while the teaching and learning (TL) practices do not correlate with students' academic performance. Finally, the table shows

that the university assessment practices (UAP) correlate significantly with students' academic performance.

CHAPTER FIVE:

INTERPRETATION AND DISCUSSIONS OF THE RESULTS

This chapter discusses the interpretation and findings of the research data collected from the field through two self-made questionnaires for students and lecturers.

- Discussion of the Findings
- Implications of the Study
- General Conclusion
- Limitations of the Study
- Recommendations
- Suggestion for further studies

Discussion of the Findings

The section embodies discussing findings from the data collected and analysed by the researcher. Data was collected using four self-designed likert scale questionnaires rated ‘strongly disagree (1), disagree (2), agree (3) and strongly agree (4) which was administered to the lecturers and students of some selected faculties of the University of Yaounde 1. This shall be discussed following the five research objectives.

The first objective was to find out the relationship between university human resources and students’ academic performance in the University of Yaounde 1. The research question derived from this objective was: Is there a relationship between the university human resources and students’ academic performance? A null hypothesis was derived from this research question which states that the university human resources do not significantly relate with students’ academic performance. Based on the findings, the result of the study presented in table 32 for students and table 43 for lecturers of chapter four revealed that, the university human resources has no relationship with students’ academic performance and the null hypothesis was upheld while the alternative hypothesis was rejected. This influenced the researcher to conclude that the recruitment, retention and development of university lecturers has no direct effect on students’ academic performance in the University of Yaounde 1. This corroborates with the findings of Metcalf, Rolfe, Stevens and Weale (2005) who argue that there a general dissatisfaction among the Staff of United Kingdom (UK) lecturers on recruitment, retention and promotion of lecturers. Their findings revealed that majority of the lecturers were satisfied with their jobs because of

factors such as research, teaching especially bright students, administrative tasks and organisational change.

The second objective was to find out the relationship between student learning resources and infrastructure on one hand and students' academic performance on the other in the University of Yaounde 1. The research question derived from this objective was: What is the relationship between the learning resources and infrastructure of the university and students' academic performance? A null hypothesis was derived from this research question which states that the student learning resources and infrastructure do have any significant relationship with students' academic performance. Based on the findings, the results presented in table 33 and 44 of chapter four reveal that learning resources and infrastructure significantly relate with students' academic performance. Therefore, the null hypothesis was rejected while the alternative hypothesis was upheld. This led the researcher to conclude that student learning resources and university infrastructure influences in one way or the other the academic performance of the students. This is in line with Amon (2017) whose findings revealed that the absence of learning resources like well-equipped library, laboratories; visual and audio visual materials do affect students' academic performance negatively. The study suggested that learning resources support students with learning difficulties, develop independence in students, help learners to master skills, improve learner proficiency and that all these promotes learning. In a similar vein, Yara and Omondi (2010) found out that insufficient on non existent learning resources, such as textbooks, teaching aids, and stationery among others, have a detrimental impact on students' academic achievement. Once more discussing how school infrastructure affects student learning, Barret, Treves, Shmis, Anbasz, and Ustinova (2019) provide data in a report that demonstrates how physical attributes of learning environments have a big influence on academic achievement. According to Barret et al., learning is influenced by age-appropriate learning environments that provide flexible learning opportunities and schools that are internally designed. Accordingly, the report makes the case that school infrastructure should be developed in a sustainable manner, learning spaces should be optimally designed for learning, and school buildings should offer a safe and healthy environment. The results also support the hypothesis put forth by Nugroho and Wibono (2019) in a study, which states that in order to improve student learning, infrastructure in the twenty-first century should give priority to projects that build science, computer, library, and public use spaces.

The third objective of the study was to find out whether student profile and support services affect students' academic performance in the University of Yaounde 1. The research question

deduced from this objective was: Do the students' profile and support services affect students' academic performance in the University? A null hypothesis was also deduced from the research question which states that student profile and support services do not significantly affect students' academic performance. Based on the data collected, the results presented in tables 34 and 45 reveal that the university student profile and support services significantly affects students' academic performance. This implies that the null hypothesis was rejected while the alternative hypothesis was accepted and maintained. It therefore means that most respondents were of the opinion that students profile and support services have an effect on students' academic performance. This might have been influenced by their knowledge on the university's the absence of admission criteria of the university, absence of merit based scholarships and fellowships as well as other support services. The outcomes are comparable to those of Voyles (2011), whose statistical examination of the study's relationship between student age and academic achievement showed a statistically significant relationship between the two variables in the field of mathematics. It stipulated that a greater percentage of older students than younger students achieved higher rates on required state assessment. Once more, the aforementioned results are consistent with research conducted by Orike and Nkpolu-Oroworukwo (2019), which found that admissions policies have a significant impact on undergraduate students' academic performance in the field of study. The study further argues that most admission policies of government and the university management need to be revisited if we must improve the academic performance of undergraduate students. The finding also corroborates with the study carried out by Sulphey, Saad and Syed (2018) which revealed that the high school grade point average (GPA) was found to be significantly correlated with the overall university GPA. The also postulated that there was also a significant relationship between the standardized admission test and the overall university GPA. The study provides inputs for devising strategies to make the eligibility tests and the process of admissions more scientific and professional.

The fourth objective of the study was to find out whether the University of Yaounde 1 pedagogic practices affect students' academic performance. The research question derived from the objective was: Do the pedagogic practices (teaching/learning) of the university affect students' academic performance? A null hypothesis was deduced from the research question which states that the university pedagogic practices have a significant effect on students' academic performance. This means that the null hypothesis was rejected meanwhile the alternative hypothesis was upheld. It therefore implies that most of the students and lecturers believed that the university pedagogic practices or the university teaching and learning processes affect

students' academic performance. Since the whole business of higher education is the training of future leaders and builders of a country and since this can only be done through teaching and learning, there is bound to be a connection between teaching and students' academic performance. This study is consistent with a similar study carried out by Ganyanpfu (2013) which revealed that combining both teacher-centred and student- centred teaching methods in teaching learners is the most effective approach that produces best students. The study emphasizes that the student-centred approach is more effective because students' little or no active involvement in the learning process could lead them to score poor academic results. Results released by Adewole (2020) support this as well, showing that student-centered teaching strategies foster greater mastery of facts than centralizing the flow of knowledge as a one way channel from lecturer to students. The results of this study are consistent with those of Muwagga (2019), who found that while teacher-centered pedagogical strategies are less effective in promoting academic achievement, student-centered pedagogical strategies are crucial for students' academic success, and the teacher-student pedagogical strategy is the least effective.

The last objective of the study was to find out the relationship between the university assessment practices and students' academic performance. The research question derived from the objective was: What is the relationship between the assessment practices of the university and students' academic performance? A null hypothesis was derived from the research question which states that the university assessment practices have no significant relationship with students' academic performance. Based on the findings, the results of the study presented in tables 36 and 47 in chapter four reveal that the university assessment practices has a strong relationship with students' academic performance. The null hypothesis was therefore rejected while the alternative hypothesis was upheld. This influenced the researcher to conclude that the university assessment practices strongly relate to students' academic performance. This was certainly true because even with the best pedagogical practices, academic performance cannot be deduced without the use of good assessment practices. Therefore, the provision of best teachers, best student support services, infrastructure and best teaching methods can be ruined by poor assessment practices because it may give wrong feedback. The findings corroborates with similar findings by Rawlusyk (2018) whose analysis and evaluation of assessment illustrate that higher education teachers use both authentic activities and examinations as assessment practices, and argues the study show very limited application of the various types of authentic tasks. This limited use of the many types of authentic techniques brings into question whether teachers fully understand how the various strategies can enhance learning.

Implications of the Study

The findings of this study have implications for all those involved in the business of higher education in Cameroon especially in the quality of higher education services. The ever increasing number of students attending the University of Yaounde 1 and other Cameroon's universities attract a greater attention on the quality of its services especially relevant to the goals of education. This is because of the continuous rise in the cost of education in Cameroon without an increase in income levels and many people do not want to waste their limited resources in education in vain. Therefore all the stakeholders must develop greater accountability by adopting strategies that promote quality education and quality products.

The findings of this investigative study imply that a lot has to be done by the University of Yaounde 1 in their pedagogic and assessment practices in order to raise their performance index and that of their students. The university administration has to fervently and regularly engage in quality assessment of teaching and assessment to ensure that set goals are achieved. This also means that each faculty through its Deans must in follow up create follow-up committees to monitor these aspects on a regular basis, making adjustments where necessary. On the other hand University lecturers and support staff must play their own role to ensure the successful implementation of quality strategies. They should on a regular basis engage in self-development efforts that can continuously improve their teaching and assessment practices. However, for the university to effectively do so, it requires the support of the Ministry of Higher Education which should provide the enabling environment including financial incentive to motivate key actors.

CONCLUSION

The study set out to investigate the effects of the internal quality assurance strategies on students' academic performance in the University of Yaounde 1. Based on the following variables such as university human resources, learning resources and infrastructure, Student profile and support services, teaching and learning and university assessment practices, the research data were analysed and the following results were obtained. The study revealed that there was no significant relationship between the university human resources and students' academic performance. This meant that the recruitment, retention, management and development of university human resources do not have any influence on the performance of students. The study also revealed that the university student learning resources and infrastructure has a significant relationship with students' academic performance. This implies that the provision of up to date

resources like libraries, laboratories, enough lecture halls, computing facilities and friendly learning spaces has a significant relationship with student success at the university. To improve students' academic performance, university stakeholders should ensure that learning resources and infrastructure should be made available or updated regularly.

The study also revealed that the student profile and support services have a significant influence on students' academic performance. This means that the student characteristics on admission including the age, the grade point average (GPA) and other support services like the availability of scholarships and fellowships, up to date restaurants, halls of residence amongst others directly impact learning. Therefore, the university should review its admission policy as well as engage in efforts towards promoting hard work. This can be done by the provisions of scholarship and fellowship schemes and not over dependent on the Presidential yearly scholarship of 50.000FCFA.

Again, the findings revealed that the university pedagogical practices or the teaching and learning process significantly affect students' academic performance. Teaching and learning are the main components of any educational venture and therefore remains the key to quality education. The findings reveal that teachers teaching processes impact learning and consequently learning outcome. From the items on the questionnaire on the teaching and learning, it was realized that students had reservations about some teaching methods. It states that the best teaching method is student centred teaching strategy because it engages students in sourcing for knowledge by trying to do things on their own. The findings suggested that evaluating teaching can be very important in the teaching learning process and in the development of lecturers. By this, peer review of lecturer evaluation of another lecturer and student evaluation of teaching were recommended.

The study also revealed that the university assessment practices have a significant effect on students' academic performance. Assessment remains the most important aspect in the business of education. If assessment is poorly handled, it can bring down even the well-established and managed educational establishments. For any assessment practices to produce valid and reliable result, university lecturers must be grounded in the art of test development, scoring and feedback practices. The university must support itself in ensuring that examinations are fair and written under good conditions. Each department should have panels that develop items, proofread them, do item review and moderation before keeping them in a well secured and protected item bank.

All departmental examinations should have items randomly selected from the item bank following a particular criteria and methodology.

Therefore, this study is relevant in raising key concerns about quality assurance in university education and its relationship with students' academic performance. This study sees internal quality assurance from practical perspectives and makes it more realistic. This study is essential in ensuring that internal quality assurance should be seen in key areas of education activities like in human resource management, student profiles, teaching and learning processes as well as assessment practices. From existing literature, it should be understood that most studies examine the causes of poor academic performance of students but failed to bring our issues on internal quality assurance which the present study identified and discussed elaborately. Taking a keen look at the above studies, none of them have carved out clearly in one document the key areas that institutional quality assurance can draw its strategies. So, this study unlike others brings out internal quality assurance strategies in key areas of university functioning which include university human resources management, provision and management of student learning resources and infrastructure, policies related to student profile and support services, pedagogical practices and university assessment practices. Therefore, based on this present study, most of the key areas of intervention to ensure institutional quality assurance becomes holistic.

Limitations of the Study

The final version of this study was achieved not without surmounting several obstacles. One obstacle was language difficulties faced especially in the data collection phase of the study. The researcher found it a little bit difficult to explain the technical issues required in the questionnaire particularly to purely French speaking students of the faculties involved in the study. The researcher then used the assistance of a professional translator to translate the questionnaires into the simplest form for easy understanding of the students. Even with this effort, the response procedures were so slow and it took the researcher almost a month to collect all the data in spite of the existence of an online version.

It was not an easy ride over to collect data from lecturers and to get documentation from the various offices. While some insisted on seeing the research authorization before attending to the researcher, others were uninterested to participate in the exercise while others preferred the online method which was used. In spite of this, their participation rate was a 100%. Again, it was not easy getting required documentation on quality assurance strategies or related documentation from the University of Yaounde 1 and from the Ministry of Higher Education. While, the whole

venture was treated with suspicion, others especially in the ministry asked for payment before service after numerous failed rendez-vous.

The outbreak of covid 19 in March 2019 delayed research especially when a general lockdown was declared in Cameroon by the government. The covid 19 lockdown prevented movement and made the collection of data almost impossible.

Recommendations

For the University of Yaounde 1 in particular and by extension, other Cameroon universities to achieve the objectives for which they were created, maintain an international outlook and standards and to ensure Cameroon's emergence by 2035, the following recommendations were proffered:

To the Lecturers of the University of Yaounde 1

For quality assurance to gain credence and yield desired outcomes, university lecturers must get fully involved in internal quality assurance ventures. The lecturers should therefore, make an effort to promote the goals of the university by respecting strictly the quality assurance guidelines spelled out by the university hierarchy. They must make the fervent effort to engage in productive research not because they want to change rank but because they want to create knowledge and solve problems. It is the lecturers to ensure the sustainability of any quality assurance system. Lecturers must continue to study because if any teacher ceases to study, he must stop teaching. Therefore, the lecturer should develop fascinating character and effective teaching style, ability to set goals, effective classroom management strategies, curriculum and subject expertise.

The university lecturers should make an effort in mastering assessment strategies and recent developments on assessment practices. They must follow good strategies in test construction to make sure that their tests measure what they intend to measure and by so doing their tests will be valid and reliable. They must have a purpose for each test and the instructions must be clear without ambiguous language. This means that the use of less difficult vocabulary and the use of appropriate level of difficulty of test items in testing should always be considered in testing. In multiple choice questions, the item must be appropriately arranged, and the test must not be too short or too long. In conclusion, they should be able to protect the item banks created in their departments.

To the University of Yaounde 1 and other Cameroonian universities

The University of Yaounde 1 is ranked the best University in Cameroon, the 31st best university in Africa and the 940th best university in the world with 40.5 points (US News and World Report, 2022 Classification of Best Universities in Africa. Part 1, 2022). This shows that there is significant effort by the university authorities and the entire university family in ensuring the quality of its services in all dimensions. But this is not enough because it is below average and therefore, the institution should continue to improve so as to gain more points and improve on its international outlook. To do so, the following recommendations are important.

The university should establish clear quality assurance units at institutional level, faculty level and departmental level. The units should begin by setting appropriate standards. The primary objective of such a unit should be to ensure successful implementation of standards and policies of the university at the various levels. This body would create and publish guidelines on internal quality assurance strategies for the university to achieve its goals and objectives. In this light, it should create awareness amongst the lecturers on quality assurance strategies and get them involved in quality assurance. These guidelines should spell out clearly good practices in lecturer recruitment, retention and promotion, provision of student learning resources, mechanisms to monitor the teaching and learning practices as well as assessment practices. Again, to promote innovation between university stakeholders, different stakeholders should be involved in the quality control system. To achieve this, the university budget should be increased to accomplish strategic objectives and should also share an information system that provides strategic indicators to the management team. The quality system should create committees where all the stakeholders are involved. These committees are charged with the evaluation of the quality of teaching and make proposals.

The University of Yaounde 1 should establish quality assurance strategies that should ensure the quality recruitment, retention, development and promotion of its human resources. The university should develop more stringent measures for teacher recruitment only lecturers with proven academic achievement. Recruitment should not only be based on the obtention of a Ph.D. but on proven ability on research, mastery in the use of information technology, efficient teaching skills and expertise on the subject matter. The University should also adopt strategies to retain best lecturers by providing incentives and fringe benefits. The university should also provide support for staff development by assisting them to attend seminars and workshops both at national and international levels. It should clear strategies on the promotion of staff. The

university should also ensure quantity and quality program coverage by the lecturers as well as teachers' evaluation and promotion. It should also encourage specialization among the lecturers.

The University should also make provisions for up to date learning resources and infrastructure. The university budgetary heads should always include this aspect. There should be accessible lecture halls, well equipped laboratories and computing facilities matching student population. The central library and other libraries in the university should be accessible, spacious, with internet services and well equipped. Other facilities that are also important in promoting the teaching and learning process include health services, sports and physical education facilities. The university buildings should be refurbished regularly to have an attractive outlook. Classrooms should be spacious and equipped with didactic materials such as microphones and whiteboards.

The university should also adopt strategies that would check the quality of student profiles and provide quality student support services. For this to be achieved, the university should set minimum admission requirements for admission into the undergraduate programs. This means that students must obtain minimum cumulative points or certain high grades in some subjects before admission into the university and some departments respectively. Without these conditions, the university is encouraging mediocrity rather than excellence. By support services, the University of Yaounde 1 should make available merit based scholarships, scholarships and fellowships for the students in the institution. It should also make provisions for staff to regularly provide academic counselling to students and for students to make complaints and academic appeals regularly. Lastly, the university should also ensure the university restaurant and halls or residence are able to satisfy student demand without limitation.

The university should promote evaluation and mechanisms for teaching support. These should include peer to peer observation whereby, a senior lecturer observes the teaching of a junior colleague during which he takes down notes on good and bad practices. At the end, the senior colleague discusses observations with the junior colleague, making recommendations. This is considered a good practice because it enables the exchange of experiences and knowledge between teachers. It is not an examination, but rather an opportunity for improvement. Again, the university should allow the teaching staff involvement in quality process through the evaluation programs. Lecturers should evaluate programs by completing questionnaires. The results of this survey should be analyzed by the staff themselves in particular meetings during which they share their experiences and learn from one another. Room should also be given for

student evaluation of teaching whereby, students assess the teaching and learning process. This practice is good if well managed.

The University of Yaounde 1 should also encourage the involvement of students in quality management processes and student evaluation. To do this, the university should train student representatives to promote their acquisition of knowledge about the university structure, university outlooks and aims, the different roles within the university and how the quality follow-up and control are undertaken. Students should also be taught with professional skills and on how they should communicate these skills in an intelligent manner to employers in professional interviews.

The university should create a stronger partnership with structures such as companies and enterprises both national and international in order to enable students take internship regularly. These will help to orientate and re-orientate students on opportunities and on how they can seize them. By so doing, such interactions will enable students know what companies and organisations out there want from graduates and they will embark on mastering those elements.

The University of Yaounde 1 should take informed steps towards the improvement of assessment practices of the university. To do so, provisions should be made for all lecturers to be trained and to master test development procedures. In this same direction, the university should ensure that all departments should establish panels that should do proofreading of items, item review and moderation of items before test administration. All efforts should also be made to ensure that each department has item banks where questions are kept after moderation for future random use. The scoring practices should also be fair and balanced and feedback should prompt with a grading system that meets international standards.

To ensure external quality assurance and as an attempt to ensure a balance, the University of Yaoundé 1 should regularly appoint external examiners who should report to the Rector. The external examiners should be independent academic experts, drawn from sister universities or from areas of relevant professional practice. External examiners give impartial advice on performance in relation to particular programs. The university requires external examiners in their expert judgement to report whether set standards are appropriate for awards or award elements, by referring to subject benchmark statements, the framework for higher education qualifications, institutional program, specifications and other relevant matters. External examiners also evaluate the standards of student performance and the comparability of the standards with those of students following similar programs in other higher educational

institutions, to evaluate the extent to which the process for assessment, examination and determination of awards are sound and have been fairly conducted.

The university should promote research and professional development of lecturers. The university should reconsider its promotion policies whereby, they believe in and consider the quantity not quality of research to recommend lecturers for promotion. It is evident that promotion is dependent on the number of articles published amongst other criteria. This may create a wrong impression if nothing is set out in relation to the quality of the articles. Again, the payment of research allowances to lecturers is seemingly automatic, yet there are no mechanisms to ensure that the allowances were actually used in research. This may promote mediocrity rather than hard work. Therefore, the university should create an instrument that overlooks the research and development of the state universities. In this direction, the university should forward only names of those who qualify by output for promotion and not by number of years put in.

The University of Yaounde 1 should continue to make a relentless effort in promoting bilingualism in the institution. It is observed that majority of courses in the university are taught in French while in all the meetings, the authorities speak only in French and that all notices are published in the French language amongst others. Therefore, French remains the dominant language of the university in spite of its bilingual nature. Bilingualism should be seen in all official documentation of the University, if it is to maintain its bilingual nature. This should include all official notices and other communication. Recruitment should also always take cognisance of the bilingual nature of the university by providing equitable number of positions for lecturers from both ends. Lecturers who master both languages should be given advantage during recruitment. Again all examinations should have the English and French versions for students to attempt them in their best language of mastery.

To the Ministry of Higher Education (MINESUP)

The Ministry of Higher Education (MINESUP) is in charge of implementing and developing government policies and programs in higher education in Cameroon. The ministry supervises all the state universities and private universities in Cameroon; therefore this study is important to the ministry. The ministry should ensure the creation of an independent national quality assurance agency to be charged with quality assurance in Cameroons tertiary education. This agency could be called Quality Assurance Agency for higher education in Cameroon. The agency would ensure external quality assurance while encouraging, assisting and monitoring internal quality assurance in Cameroon’s universities.

The Cameroon's National Advisory Council charged with accreditation of Cameroon's university needs to do more in improving institutional quality in Cameroons tertiary education. Created by law no. 98/004 of April 1998, this organ is charged with the responsibility of overseeing that minimum academic standards for all programs taught in Cameroonian Universities are according to guidelines. More is expected from this institution as it is more in principle than in practice. It should from time to time invite international accreditation institutions to rate Cameroon's public institutions using global standards. This will help in identifying loopholes and methods to fine-tune them.

The Ministry of Higher Education should allocate more funds in its annual budgetary allocations to the universities to be able to implement its internal quality assurance strategies for better results. These funds will help the universities to be able to promote the teaching and learning process by way of enhancing staff development through the provision of fringe benefits, payment of research allowances on time, incentives, well equipped and furnished offices for lecturers, increased salaries and general welfare of the lecturers. Adequate funding can solve the problems of staff shortage in Cameroons' universities, inadequate lecture halls, inadequate computing facilities and shortage of library facilities amongst others which could have negative implications on students' academic performance.

The Ministry of Higher Education and Cameroons' education policy designers should rethink, re-image and fine-tune the implementation of the LMD (Bachelors-Master-Doctorate) system. Introduced in Cameroon's higher education space since 2007, this system though with some advantages seems to be a misfit in the Cameroon educational system because it was purely adopted for the European set up, yet imported to Cameroon in haste. Since Cameroon's higher education system is incompatible with that of Europe, instruments created for that continent cannot be used here without being modified to take into account the unique circumstances of Cameroon. Felix and Sophie (2022) actually claim that the LMD system in place at Cameroonian universities does not align with the original goals. They also argue that Cameroon's adoption of the LMD model seems premature and that significant modernization efforts are needed before the university system there can fully embrace and benefit from the LMD. Most higher educational institutions in Cameroon are overcrowded, understaffed, poorly equipped with poor student learning and living conditions, making it difficult to achieve educational goals. Therefore, it should be modified to suit the context of Cameroon.

The socio-political and economic circumstances and characteristics of the country should be prioritized during curriculum planning and conception. The curriculum including delivery methods should be defined consideration the set ups of the country and following the realities of Cameroon. Economic operators should be involved in curriculum conception and there should also be a constant interaction between university authorities and the relevant economic operators and employers to ensure that training provided by the universities reflect their job needs. Therefore, the ministry and other stakeholders should make an effort in modernizing the present curriculum to involve specific fields and skills.

The Ministry of Higher Education should play its role in promoting bilingualism in the University of Yaounde 1. Considering that the institution is French dominated, the ministry can ensure that the Francophone lecturers learn English as much as Anglophones. It should increase the number of Anglophones lecturers in the university and the number of content courses to be taught in a year should be made known. Provision should also be made to encourage bilingualism. For instance promotion, appointment or change of grade should consider bilingualism a measuring rod. To be specific, there should be a compensation for a Faculty member who can teach a content subject and assess students' work in both languages. Bilingualism should be practiced in the university by all stakeholders in all aspects of university functioning especially teaching and assessment.

The ministry should provide resources for the capacity building and training of credible professional staff to manage quality assurance processes with integrity and consistency across institutions and programs over time. It should also increase the number of academic staff in higher education institutions (HEIs) with knowledge and experience in conducting self-evaluations and peer review. This will reduce the strain on the senior staff of HEIs as they have to support both their own internal quality system as well as externally quality assurance processes of their national agencies. Capacity building efforts should be directed to the building of a culture of quality within HEIs because without a strong culture of quality in institutions of higher learning, there is little chance of success at the national level. Culture of quality should therefore, engage everyone in the institution who alongside the teaching staff must undergo pre-requisite training in self-evaluation and peer-reviewing.

The ministry should also engage in partnership with foreign bodies, institutions and QA agencies to tap from their rich experiences and expertise in quality assurance issues in an attempt to continue to add of improve on our quality assurance practice. This will help to supplement local

capacity and bring technical assistance to develop quality standards particularly as regards to the regulation of e-learning and cross border delivery of tertiary education. MINESUP should by this, promote regional collaboration in quality assurance in areas like peer review for accreditation purposes, regional accreditation agencies, common standards and guidelines for cross-border education, mechanisms for credit transfer and recognition of qualifications and sharing experiences.

The government should reconsider or review the criteria for tertiary education funding. Therefore, the allocation of public resources to tertiary educational institutions should be linked to quality factors as a strategy for encouraging the institutions to undertake quality improvements. In this case, funding should be classified and given according to attainment of some set quality standards. This will encourage competition amongst the institutions and certainly improve quality education. Without such a linkage, effective response to quality assurance as recommendations by public HEIS will be limited and eventually QA might lose credibility.

Suggestions for Further Studies

This study was limited only to the internal quality assurance strategies in five main aspects of university functioning such as human resources, student learning resources and infrastructure, student profile and support services, university pedagogic and assessment practices in their relation to students' academic performance in the University of Yaounde 1. The same study can be carried using internal quality assurance strategies in curriculum design and delivery and its relation to students' academic performance in the University of Yaounde 1.

Another study of the same magnitude and with the same variables can be carried out in another Cameroonian public university. For instance, internal quality assurance strategies and students' academic performance in the University of Bamenda.

A comparative study can also be carried out to compare the quality assurance strategies of some state universities in Cameroon. For instance a comparative study can be carried out to compare the quality assurance practices of the University of Dschang and those of the University of Buea.

Thirdly, it could be suggested that a comparative study can be carried out to compare the internal quality assurance strategies of the University of Yaounde 1 and those of the University of Buea, for example. These strategies would then be correlated to students' academic performance in

those institutions. This could highlight the strengths and weaknesses of the bilingual university and the purely Anglo-Saxon university.

The researcher also suggests that another similar study can be carried out on external quality assurance strategies and students' academic performance in the University of Yaounde 1. This shall highlight external quality systems and their role in the promotion of quality education and by extension relate its impact on students' academic performance.

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APPENDIXES

Appendix 1: Questionnaire

QUESTIONNAIRE (FOR STUDENTS)

I am a PhD research student of the Department of Curriculum and Evaluation, Faculty of Education at the University of Yaounde 1. I am carrying out a research study on the quality of education as one of the requirements for the award of a PhD in Education. My findings would depend on your answers and therefore, I will be very grateful if you are as honest and straight forward as possible in your answers. Your responses shall be treated confidentially and would be used strictly for academic purposes. Please kindly fill this questionnaire and return it.

Section I: Demographic Information (Tick as appropriate)

1. Sex: Male ☐ Female ☐

2. Age: 18 – 22 ☐ 23 -27 ☐ 31-35 ☐ 36 -40 ☐ 41 -50 ☐

3. Present Year/ Level : 2 ☐ Degree ☐ Master 1 ☐ Masters 2 ☐ PhD 1 ☐ PhD 2 ☐ PhD3 ☐

4. Department: .....

5. Faculty: .....

Instructions: Please rate how strongly you agree or disagree with each of the following statements by ticking the most appropriate response as described below'

Strongly Disagree (SD)	Disagree (D)	Agree(A)	Strongly Agree (SA)
1	2	3	4

Section II: University Human resources (Lecturers, administration and support staff)

SN	Statement	SD 1	D 2	A 3	SA 4
1	Only qualified and experienced teachers are recruited into your university				
2	Your university has adequate teaching staff				

3	The university has very competent teaching staff				
4	The administration provides support for staff development all the time				
5	There is an effective system that recognizes and rewards staff performance				
6	The Staff workloads are very appropriate to allow for effective research				
7	Most appointments in the university are not based on merit but on other factors				
8	The university leadership is open, inspirational and not dictatorial				

Section III : **Learning resources and infrastructure**

SN	**Statement**	**SD 1**	**D 2**	**A 3**	**SA 4**
1	The University has adequate and accessible lecture halls.				
2	The University has adequate and accessible laboratories.				
3	The class sizes are appropriate and not overcrowded				
4	There are computing facilities (computers) matching demands and number of students				
5	The school library is not spacious and poorly equipped				
6	The students regularly make use of library resources				
7	There are adequate health services in the university				
8	There are adequate sports and physical education facilities				
9	The university has maximum number of new admissions each year and maintains statutory class sizes.				
10	Your university has created very friendly learning spaces				
11	Your campus buildings are very comfortable and beautiful				
12	There are no counselling services for students in the university				
13	There is enough didactic materials (microphones, whiteboards, chalkboards) in the lecture halls				
14	Lecturers are allocated comfortable and well equipped offices				
15	The university provides learning facilities to its lecturers				
16	Students cannot be transferred to other national and international universities				
17	Student unions are given powers to function freely				

Section IV: Student profile and support services

SN	Statement	SD 1	D 2	A 3	SA 4
1	The university follows transparent admission procedures wherein only the best students are admitted.				
2	Students must not necessarily have high cumulative points before they are granted admissions into the university				
3	Students are not required to have certain grades in specific subjects before they are admitted into some departments of the university.				
4	All faculty requirements are fulfilled before admission into each faculty				
5	There are no merit-based scholarships, scholarships and fellowships for students in the university.				
6	There is regular participation of staff in advising students, and providing academic counselling to students				
7	Students are never represented in academic decision-making bodies of the university.				
8	There is provision for students to make complaints and academic appeals regularly.				
9	Students' worries are always given attention/solutions by the administration				
10	There is an absence of discrimination on campus, so students feel valued, fairly treated and safe				
11	Students get meals every day at the university restaurant at cheap rates				
12	It is easy for a student to get a room/bed at the university hall of residence				
13	The physically challenged students are given due considerations in all aspects of the university functioning				

Section V: **Teaching and learning (University pedagogic practices)**

SN	Statement	SD 1	D 2	A 3	SA 4
1	Teaching uses visualization of information in lecture halls				
2	Learning is always correlated with the course design and instructor				
3	Students are dissatisfied with teaching in the university.				

4	Lecturers always engage in innovative teaching				
5	Teaching is always student centered				
	Students experience good quality teaching and manageable workloads				
6	There is provision for colleague evaluation of the teaching of another colleague.				
7	Student evaluation (Student-lecturer assessment*)* of teaching and learning is also promoted at all times				
8	Students' examination results are always published early				
9	There is constant interaction with various relevant employers and academic peers				
10	Lecturers have technical knowhow in their various subject areas				
11	The Lecturers always use new media and methods in teaching.				
12	The student drop out from the university is very high				

Section VI : University assessment practices

SN	**Statement**	**SD 1**	**D 2**	**A 3**	**SA 4**
1	Examinations are written in spacious, less crowded halls				
2	Lecturers have the knowledge and a mastery of test development practices				
3	All the departments have panels that do proofreading of items; item review and moderation of items before test administration.				
4	There is an no item bank in any department or faculty where items are kept after moderation for future random use				
5	Lecturers test is always a representative sample of subject domains or topics				
6	There is always clarity in assessment and marking criteria at the beginning of each course				
7	Students are always made before each test to understand the various modes of thinking and reasoning that are expected.				
8	Lecturers carry out transparent and accurate scoring practices				
9	Instructions in examinations are hardly clear, sometimes with ambiguous language				
10	The grading system in your university meets international standards				

11	There are varieties of assessment practices				
12	Feedback(results) is always slow and ineffective in the university				
13	Scoring of test is always fair and balanced for all students				
14	Each test in the university has the English and French versions for students to understand in their best language				
15	The university has adopted institutional self –assessment practices.				
16	Marks can easily be bought by students				
17	Female students are usually favoured by male teachers				

NB: Items means test questions.

Section C: Internal Quality Assurance Strategies and Student Academic Achievement

SN	**Statement**	**SD 1**	**D 2**	**A 3**	**SA 4**
1	Internal quality assurance system has an impact on students' academic performance				
2	Availability of effective human resources in the university affects students' performance				
3	Learning resources and infrastructure affect students performance				
4	Student profile and support services are important to students results				
5	Curriculum, teaching and learning do have an effect on students' performance				
6	Assessment practices correlate with students' performance				

END

Thank you very much for your kind cooperation and participation

QUESTIONNAIRE POUR MAGHA PROTUS SONGSI (POUR LES ÉTUDIANTS)

Je suis étudiant en Doctorat PhD a l'Université de Yaoundé 1 , Faculté des Sciences de l'Education précisément au Département de Curricula et Evaluation . Je sollicite votre collaboration dans la phase de nos investigations en vous invitant à remplir ce questionnaire avec la plus grande sincérité car nos conclusions dépendront de la fiabilité de vos réponses . Par ailleurs nous vous garantissons de la confidentialité de vos réponses qui ne seront utilisées qu à des fins académiques . Merci de bien vouloir retourner ce questionnaire après remplissage

Section I : Informations démographiques (cochez la case appropriée)

1. **Sexe** : Homme ☐ Femme ☐

2. **Âge** : 18 – 22 ☐ 23 -27 ☐ 31-35 ☐ 36 -40 ☐ 41 -50 ☐

3. **Année/Niveau** :2 ☐ Licence ☐ Master 1 ☐ Master 2 ☐ Doctorat 1 ☐

Doctorat 2 ☐ Doctorat3 ☐

4.**Département** : ....

5. **Faculte** : ....

Instructions : Veuillez indiquer dans quelle mesure vous êtes d'accord ou pas d'accord avec chacune des affirmations suivantes en cochant la réponse la plus appropriée, comme décrit ci-dessous.

Pas du tout d'accord (SD)	Pas d'accord (D)	D'accord(A)	Tout à fait d'accord (SA)
1	**2**	**3**	**4**

Section II : Ressources Humaines Universitaires (Enseignants et administration)

SN	Déclaration	**SD 1**	**D 2**	**A 3**	**SA 4**
1	Seuls des enseignants qualifiés et expérimentés sont recrutés dans l' université				
2	Votre université dispose d'un personnel enseignant adéquat, très qualifié et très competent				
3	L'administration soutient en permanence le développement du personnel				
4	Il existe un système efficace qui reconnaît et récompense les performances du personnel				

5	Les charges de travail du personnel sont très appropriées pour permettre une recherche efficace				
6	Toutes les nominations à l'université sont basées sur le mérite				
7	La direction de l'université est ouverte, inspirante et non dictatoriale				

Section III : Ressources et infrastructures d'apprentissage

SN	Déclaration	**SD 1**	**D 2**	**A 3**	**SA 4**
1	L'Université dispose d'amphithéâtres et de laboratoires adéquats et accessibles.				
2	La taille des classes est appropriée et non surpeuplée				
3	Il existe des installations informatiques (ordinateurs) correspondant aux demandes et au nombre d'étudiants				
4	La bibliothèque de l'universite n'est pas spacieuse et mal équipée				
5	Il existe des services de santé, des installations sportives et d'éducation physique adéquats				
6	L'université a un nombre maximum de nouvelles admissions chaque année et maintient la taille des classes statutaires.				
7	Votre université a créé des espaces d'apprentissage très conviviaux				
8	Les bâtiments de votre campus sont très confortables et beaux				
9	Il n'y a pas de services de conseil pour les étudiants à l'université				
10	Il y a suffisamment de matériel didactique (microphones, tableaux blancs, tableaux noirs) dans les salles de classe				
11	Les professeurs se voient attribuer des bureaux confortables et bien équipés				
12	L'université fournit des installations d'apprentissage à ses professeurs				
13	Les étudiants ne peuvent pas être transférés dans d'autres universités nationales et internationals				
14	Les syndicats étudiants ont le pouvoir de fonctionner librement				

Section IV : Profil de l'étudiant et services d'accompagnement

SN	**Déclaration**	**SD 1**	**D 2**	**A 3**	**SA 4**
1	L'université suit des procédures d'admission transparentes dans lesquelles seuls les meilleurs étudiants sont admis.				

2	Les étudiants doivent avoir des points cumulés élevés avant d'être admis à l'université				
3	Les étudiants ne sont pas tenus d'avoir certaines notes dans des matières spécifiques avant d'être admis dans certains départements de l'université.				
4	Toutes les exigences de la faculté sont remplies avant l'admission dans chaque faculté				
5	Il n'y a pas de bourses d'études et de bourses d'études fondées sur le mérite pour les étudiants de l'université				
6	Il y a une participation régulière du personnel pour conseiller les étudiants et fournir des conseils académiques aux étudiants				
7	Les étudiants ne sont jamais représentés dans les organes décisionnels académiques de l'université.				
8	Il est prévu que les étudiants déposent régulièrement des plaintes et des recours académiques.				
9	Les soucis des étudiants sont toujours résolus par l'administration				
10	Il y a une absence de discrimination sur le campus, de sorte que les étudiants se sentent valorisés, traités équitablement et en sécurité				
11	Les étudiants reçoivent des repas tous les jours au restaurant universitaire à des tarifs avantageux				
12	Il est facile pour un étudiant d'obtenir une chambre/un lit à la résidence universitaire				
13	Les étudiants handicapés physiques sont dûment pris en compte dans tous les aspects du fonctionnement de l'université				

Section V :Enseignement et apprentissage (Pratiques pédagogiques universitaires)

SN	Déclaration	**SD 1**	**D 2**	**A 3**	**SA 4**
1	L'enseignement utilise la visualisation d'informations dans les amphithéâtres				
2	L'apprentissage est toujours corrélé à la conception du cours et à l'instructeur				
3	Les étudiants sont mécontents de l'enseignement à l'université.				
4	Les conférenciers s'engagent toujours dans un enseignement innovant				
5	L'enseignement est toujours centré sur l'étudiant				
6	Les étudiants bénéficient d'un enseignement de bonne qualité et de charges de travail gérables				
7	Il est prévu que les collègues évaluent l'enseignement d'un autre collègue.				

8	L'évaluation de l'enseignement et de l'apprentissage par les étudiants (évaluation de l'étudiant-enseignant) est également encouragée à tout moment				
9	Les résultats des examens des étudiants sont toujours publiés tôt				
10	Il y a une interaction constante avec divers employeurs et pairs universitaires pertinents				
11	Les enseignants ont un savoir-faire technique dans leurs différents domaines				
12	Les enseignants utilisent toujours de nouveaux médias et méthodes d'enseignement.				
13	Le taux d'abandon des étudiants à l'université est très élevé				

Section VI : Pratiques universitaires d'évaluation

SN	Déclaration	**SD 1**	**D 2**	**A 4**	**SA 5**
1	Les examens sont rédigés dans des salles spacieuses et moins encombrées				
2	Les enseignants ont la connaissance et la maîtrise des pratiques de développement de tests				
3	Tous les départements ont des panels qui font la relecture des articles ; examen des items et modération des items avant l'administration du test.				
4	Il n'y a pas de banque de questions dans n'importe quel département ou faculté où les questions sont conservés après modération pour une utilisation future aléatoire				
5	Les tests des enseignants sont toujours un échantillon représentatif de domaines ou de sujets				
6	Les critères d'évaluation et de notation sont toujours clairs au début de chaque cours				
7	Les élèves sont toujours amenés avant chaque épreuve à comprendre les différents modes de pensée et de raisonnement qui sont attendus.				
8	Les enseignants appliquent des pratiques de notation transparentes et précises				
9	Les instructions aux examens ne sont guère claires, parfois avec un langage ambigu				
10	Le système de notation de votre université répond aux normes internationales				
11	Il existe différentes pratiques d'évaluation				
12	Les retours (résultats) sont toujours lents et inefficaces à l'université				
13	La notation du test est toujours juste et équilibrée pour tous les élèves				
14	Chaque test à l'université a les versions anglaise et française pour que les étudiants comprennent dans leur meilleure langue				
15	L'université a adopté des pratiques institutionnelles d'auto-évaluation.				
16	Les notes peuvent être achetées facilement par les étudiants				

17	Les étudiantes sont généralement favorisées par les enseignants masculins				

NB : Les éléments désignent les questions de test.

Section C : Stratégies internes d'assurance qualité et réussite scolaire des étudiants

SN	Declaration	SD 1	D 2	A 3	SA 4
1	Le système d'assurance qualité interne a un impact sur les performances académiques des étudiants				
2	La disponibilité de ressources humaines efficaces à l'université affecte les performances des étudiants				
3	Les ressources et infrastructures d'apprentissage sont très importantes				
4	Le profil de l'étudiant et les services de soutien sont importants pour les résultats des étudiants				
5	Le processus d'enseignement et d'apprentissage a un effet sur les performances des élèves				
6	Les pratiques d'évaluation sont en corrélation avec les performances des étudiants				

FIN

Merci beaucoup pour votre aimable coopération et participation

APPNDIX 2: QUESTIONNAIRE (FOR LECTURERS)

I am a PhD research student of the Department of Curriculum and Evaluation, Faculty of Education at the University of Yaounde 1. I am carrying out a research study as one of the requirements for the award of a PhD in Education. My findings would totally depend on your answers and therefore, I will be very grateful if you are as honest and straight forward as possible in your answers. Your responses shall be treated confidentially and would be used strictly for academic purposes. Please kindly fill this questionnaire and return it.

Section I: Demographic Information (Tick as appropriate)

1. Sex: Male ☐ **Female** ☐

2. Rank : Assistant Lecturer ☐ **Lecturer** ☐ **Associate Professor** ☐ **Professor** ☐

3. Age : …….

4. Faculty: FSE ☐ **FS** ☐ **FALHS** ☐

5. Years of experience: ☐

6. Qualification.....

7. Speciality.....

Instructions: Please Sir, rate how strongly you agree or disagree with each of the following statements by ticking the most appropriate response as described below.

Strongly Disagree (SD)	**Disagree (D)**	**Agree (A)**	**Strongly Agree (SA)**
1	**2**	**3**	**4**

Section II: University Human resources (Lecturers and administration)

SN	Statement	SD 1	D 2	A 3	SA 4
1	The university has no transparent Teacher recruitment procedures				
2	Only qualified, experienced teachers are recruited into your university				

3	The university has adequate, very qualified and very competent teaching staff				
4	The Administration has no teacher retention strategies				
5	The administration provides support for staff development all the time				
6	There is a system that recognizes and rewards staff performance				
7	There are no established grievance redressal procedures				
8	The Staff workloads are very appropriate to allow for effective research				
9	Most appointments in the university are not based on merit				
10	The university leadership is open, inspirational and not dictatorial				
11	The university has required number of Lecturers , proportionate to the available courses				
12	Students are overwhelmingly more than Lecturers				
13	The university enhances advancement of its lecturers				
14	The university promotes research and provides fringe benefits to lecturers				
15	Lecturers' participation in relevant national and international workshops and seminars is encouraged and supported				
16	Lecturers mission allowances are not regularly paid				

Section III :_ Learning resources and infrastructure

SN	Statement	SD 1	D 2	A 3	SA 4
1	The University has adequate and accessible lecture halls and laboratories.				
2	The class sizes are appropriate and not overcrodwded				
3	There are computing facilities (computers) matching demands and number of students				
4	The school library is not spacious and poorly equipped				
5	There are adequate health services, sports and physical education facilities				
6	The university has maximum number of new admissions each year and maintains statutory class sizes.				
7	The university has created very friendly learning spaces				
8	Your campus buildings are very comfortable and beautiful				
9	There are no counselling services for students in the university				

10	There is enough didactic materials (microphones, whiteboards, chalkboards) in the lecture halls				
11	Lecturers are allocated comfortable and well equipped offices				
12	The university provides learning facilities to its lecturers				
13	Students cannot be transferred to other national and international universities				
14	Student unions are given power				

Section IV: Student profile and support services

SN	Statement	SD 1	D 2	A 3	SA 4
1	The university follows transparent admission procedures wherein only the best students are admitted.				
2	Students must have high cumulative points before they are granted admissions into the university				
3	Students are not required to have certain grades in specific subjects before they are admitted into some departments of the university.				
4	All faculty requirements are fulfilled before admission into each faculty				
5	There are no merit-based scholarships, scholarships and fellowships for students in the university.				
6	There is regular participation of staff in advising students, and providing academic counselling to students				
7	Students are never represented in academic decision-making bodies of the university.				
8	There is provision for students to make complaints and academic appeals regularly.				
9	Students' worries are always given solutions by the administration				
10	There is an absence of discrimination on campus, so students feel valued, fairly treated and safe				
11	Students get meals every day at the university restaurant at cheap rates				
12	It is easy for a student to get a room/bed at the university hall of residence				
13	The physically challenged students are given due considerations in all aspects of the university functioning				

Section V:_ Teaching and learning

SN	Statement	SD 1	D 2	A 3	SA 4
1	Teaching uses visualization of information in lecture halls				
2	Learning is always correlated with the course design and instructor				
3	Students are dissatisfied with teaching in the university.				
4	Lecturers always engage in innovative teaching				
5	Teaching is always student centered				
	Students experience good quality teaching and manageable workloads				
6	There is provision for colleague evaluation of the teaching of another colleague.				
7	Student evaluation (Student-lecturer assessment*)* of teaching and learning is also promoted at all times				
8	Students' examination results are always published early				
9	There is constant interaction with various relevant employers and academic peers				
10	Lecturers have technical knowhow in their various subject areas				
11	The Lecturers always use new media and methods in teaching.				
12	The student drop out from the university is very high				

Section VI : University assessment practices

SN	Statement	SD 1	D 2	A 3	SA 4
1	Examinations are written in spacious, less crowded halls				
2	Lecturers have the knowledge and a mastery of test development practices				
3	All the departments have panels that do proofreading of items; item review and moderation of items before test administration.				
4	There is an no item bank in any department or faculty where items are kept after moderation for future random use				
5	Lecturers test is always a representative sample of subject domains or topics				
6	There is always clarity in assessment and marking criteria at the beginning of each course				

7	Students are always made before each test to understand the various modes of thinking and reasoning that are expected.				
8	Lecturers carry out transparent and accurate scoring practices				
9	Instructions in examinations are hardly clear, sometimes with ambiguous language				
10	The grading system in your university meets international standards				
11	There are varieties of assessment practices				
12	Feedback(results) is always slow and ineffective in the university				
13	Scoring of test is always fair and balanced for all students				
14	Each test in the university has the English and French versions for students to understand in their best language				
15	The university has adopted institutional self –assessment practices.				
16	Marks can be easily be bought by students in the university				
17	Female students are usually favoured by male teachers				

NB: Items means test questions.

Section C: Internal Quality Assurance strategies and Student Academic Achievement

SN	**Statement**	**SD 1**	**D 2**	**A 3**	**SA 4**
1	Internal quality assurance system has an impact on students' academic performance				
2	Availability of effective human resources in the university affects students' performance				
3	Learning resources and infrastructure affect students' performance				
4	Student profile and support services are important to students' results				
5	Curriculum, teaching and learning always has an effect on students' performance				
6	Assessment practices correlate with students' performance				

END

Thank you very much for your kind cooperation and participation

QUESTIONNAIRE POUR MAGHA PROTUS SONGSI (POUR LES PROFESSEURS)

Je suis doctorant au Département des Curicula et d'évaluation de la Faculté d'éducation de l'Université de Yaoundé 1. Je réalise une étude de recherche comme l'une des conditions requises pour l'obtention d'un doctorat en éducation. Mes conclusions dépendraient totalement de vos réponses et, par conséquent, je vous serai très reconnaissant si vous êtes aussi honnête et direct que possible dans vos réponses. Vos réponses seront traitées de manière confidentielle et seront utilisées strictement à des fins académiques. Veuillez remplir ce questionnaire et le renvoyer.

Section I : Renseignements démographiques (cocher au besoin)

Section I : Informations démographiques (cochez la case appropriée)

1. **Sexe** : Homme ☐ Femme ☐

2. Rang : Assistant ☐ **Maître de conférences** ☐ **Professeur associé** ☐ **Professeur** ☐

3. **Âge** : ……

4. **Faculté :** **FSE** ☐ **FS** ☐ **FALHS** ☐

5. Années d'expérience : ....

6. **Faculte** : ....

7. **Qualification .....**
8. Spécialité .....

Instructions : S'il vous plaît Monsieur**,** veuillez indiquer dans quelle mesure vous êtes d'accord ou pas d'accord avec chacune des affirmations suivantes en cochant la réponse la plus appropriée, comme décrit ci-dessous.

Pas du tout d'accord (SD)	Pas d'accord (D)	D'accord(A)	Tout à fait d'accord (SA)
1	**2**	**3**	**4**

Section II : Ressources humaines de l'Université (chargés de cours et administration)

SN	**Declaration**	SD 1	D 2	A 3	SA 4
1	L'université n'a pas de procédures transparentes de recrutement des enseignants				
2	Seuls des enseignants qualifiés et expérimentés sont recrutés dans votre université				
3	L'université dispose d'un personnel enseignant adéquat, très qualifié et très compétent				
4	L'administration n'a pas de stratégies de rétention des enseignants				
5	L'administration soutient en permanence le développement du personnel				
6	Il existe un système qui reconnaît et récompense le rendement du personnel				
7	Il n'existe pas de procédure de règlement des griefs				
8	La charge de travail du personnel est très appropriée pour permettre une recherche efficace				
9	La plupart des nominations à l'université ne sont pas fondées sur le mérite				
10	La direction de l'université est ouverte, inspirante et non dictatoriale				
11	L'université a besoin d'un nombre de conférenciers, proportionnel aux cours disponibles				
12	Les étudiants sont largement plus que des conférenciers				
13	L'université améliore l'avancement de ses enseignants				
14	L'université promeut la recherche et offre des avantages extralégaux aux enseignants				
15	La participation des conférenciers aux ateliers et séminaires nationaux et internationaux pertinents est encouragée et soutenue.				
16	Les indemnités de mission des enseignants ne sont pas régulièrement versées				

Section III : Ressources et infrastructures d'apprentissage

SN	**Declaration**	SD 1	D 2	A 3	SA 4
1	L'Université dispose d'amphithéâtres et de laboratoires adéquats et accessibles.				

2	La taille des classes est appropriée et non surdimensionnée				
3	Il y a des installations informatiques (ordinateurs) adaptées aux demandes et au nombre d'étudiants				
4	La bibliothèque de l'école n'est pas spacieuse et mal équipée				
5	Il existe des services de santé, des installations sportives et d'éducation physique adéquats				
6	L'université accueille un nombre maximal de nouvelles admissions chaque année et maintient l'effectif réglementaire des classes.				
7	L'université a créé des espaces d'apprentissage très conviviaux				
8	Les bâtiments de votre campus sont très confortables et beaux				
9	Il n'y a pas de services de conseil pour les étudiants à l'université				
10	Il y a suffisamment de matériel didactique (microphones, tableaux blancs, tableaux noirs) dans les amphithéâtres				
11	Les enseignants se voient attribuer des bureaux confortables et bien équipés				
12	L'université met à la disposition de ses enseignants des installations d'apprentissage				
13	Les étudiants ne peuvent pas être transférés dans d'autres pays				
14	Les syndicats étudiants ont le pouvoir				

Section IV : Profil de l'étudiant et services de soutien

SN	**Declaration**	SD 1	D 2	A 3	SA 4
1	L'université suit des procédures d'admission transparentes dans lesquelles seuls les meilleurs étudiants sont admis.				
2	Les étudiants doivent avoir un cumul élevé de points avant d'être admis à l'université.				
3	Les étudiants ne sont pas tenus d'avoir certaines notes dans des matières spécifiques avant d'être admis dans certains départements de l'université.				
4	Toutes les exigences de la faculté sont remplies avant l'admission dans chaque faculté				
5	Il n'y a pas de bourses d'études fondées sur le mérite pour les étudiants de l'université.				

6	Le personnel participe régulièrement aux conseils et aux conseils scolaires des étudiants				
7	Les étudiants ne sont jamais représentés dans les organes de décision académiques de l'université.				
8	Il est prévu que les étudiants puissent régulièrement déposer des plaintes et faire appel à leurs études.				
9	Les inquiétudes des étudiants sont toujours résolues par l'administration				
10	Il n'y a pas de discrimination sur le campus, de sorte que les étudiants se sentent valorisés, traités équitablement et en sécurité				
11	Les étudiants prennent des repas tous les jours au restaurant de l'université à des tarifs bon marché				
12	Il est facile pour un étudiant d'obtenir une chambre/un lit à la résidence universitaire				
13	Les étudiants handicapés physiques sont dûment pris en compte dans tous les aspects du fonctionnement de l'université				

Section V : Enseignement et apprentissage

SN	**Declaration**	SD 1	D 2	A 3	SA 4
1	L'enseignement utilise la visualisation de l'information dans les amphithéâtres				
2	L'apprentissage est toujours corrélé avec la conception du cours et l'instructeur				
3	Les étudiants sont insatisfaits de l'enseignement à l'université.				
4	Les enseignants s'engagent toujours dans un enseignement innovant				
5	L'enseignement est toujours centré sur l'étudiant Les étudiants bénéficient d'un enseignement de bonne qualité et d'une charge de travail gérable				
6	Il est prévu que l'enseignement d'un autre collègue soit évalué par un collègue.				
7	L'évaluation de l'enseignement et de l'apprentissage par les étudiants (évaluation étudiant-professeur) est également encouragée à tout moment				
8	Les résultats des examens des étudiants sont toujours publiés à l'avance.				

9	Il y a une interaction constante avec divers employeurs et pairs universitaires pertinents.				
10	Les enseignants ont un savoir-faire technique dans leurs différents domaines				
11	Les conférenciers utilisent toujours les nouveaux médias et les nouvelles méthodes d'enseignement				
12	Le taux d'abandon des étudiants à l'université est très élevé				

Section VI : Pratiques d'évaluation des universités

SN	**Declaration**	SD 1	D 2	A 3	SA 4
1	Les examens sont passés dans des salles spacieuses et moins fréquentées.				
2	Les enseignants ont la connaissance et la maîtrise des pratiques de développement de tests				
3	Tous les départements ont des panels qui font la relecture des articles ; Révision et modération des éléments avant l'administration du test.				
4	Il n'y a pas de banque de documents dans un département ou une faculté où les documents sont conservés après modération pour une utilisation aléatoire future.				
5	Les critères d'évaluation et de notation sont toujours clairs au début de chaque				
6	Les critères d'évaluation et de notation sont toujours clairs au début de chaque cours				
7	Avant chaque épreuve, les élèves sont toujours amenés à comprendre les différents modes de pensée et de raisonnement attendus.				
8	Les enseignants appliquent des pratiques de notation transparentes et précises				
9	Les instructions lors des examens sont à peine claires, parfois dans un langage ambigu				
10	Le système de notation de votre université répond aux normes internationales				
11	Il existe diverses pratiques d'évaluation				
12	Les retours d'information sont toujours lents et inefficaces à l'université				
13	La notation du test est toujours juste et équilibrée pour tous les élèves				

14	Chaque test de l'université comporte les versions anglaise et française pour que les étudiants les comprennent dans leur meilleure langue				
15	L'université a adopté des pratiques d'auto-évaluation institutionnelles.				
16	Les notes peuvent être facilement achetés par les étudiants à l'université				
17	Les étudiantes sont généralement favorisées par les enseignants masculins				

NB : Items signifie questions de test.

Section C : Assurance qualité interne et réalisations académiques des étudiants

SN	Déclaration	TD	D	A	TA
1	Le système interne d'assurance qualité a un impact sur le rendement académique des étudiants				
2	La disponibilité de ressources humaines efficaces à l'Université affecte le rendement des étudiants				
3	Les ressources et les infrastructures d'apprentissage sont très importantes pour le rendement des étudiants				
4	Le profil des étudiants et les services d'appui sont importants pour les résultats des étudiants				
5	Les programmes d'enseignement, l'enseignement et l'apprentissage ont toujours un impact sur le rendement des étudiants				
6	Les pratiques d'évaluation influencent le rendement des étudiants				

FIN

Merci beaucoup de votre aimable coopération et de votre participation

REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie

FACULTE DES SCIENCES DE L'EDUCATION

DEPARTEMENT DE CURRICULA ET EVALUATION

REPUBLIC OF CAMEROON
Peace – Work - Fatherland

FACULTY OF EDUCATION

DEPARTMENT OF CURRICULA AND EVALUATION

N° 595 /21/UYI/FSE/C&E/

RESEARCH AUTORISATION

I the undersigned, Professor **BELA Cyrille Bienvenu**, Dean of the Faculty of Education, University of Yaounde I, hereby certify that **MAGHA Protus SONGSI**, matriculation **N°18W6616**, is registered for Ph.D. in the Faculty of Education, Department of Curricula and Evaluation, option: Measurement and Evaluation.

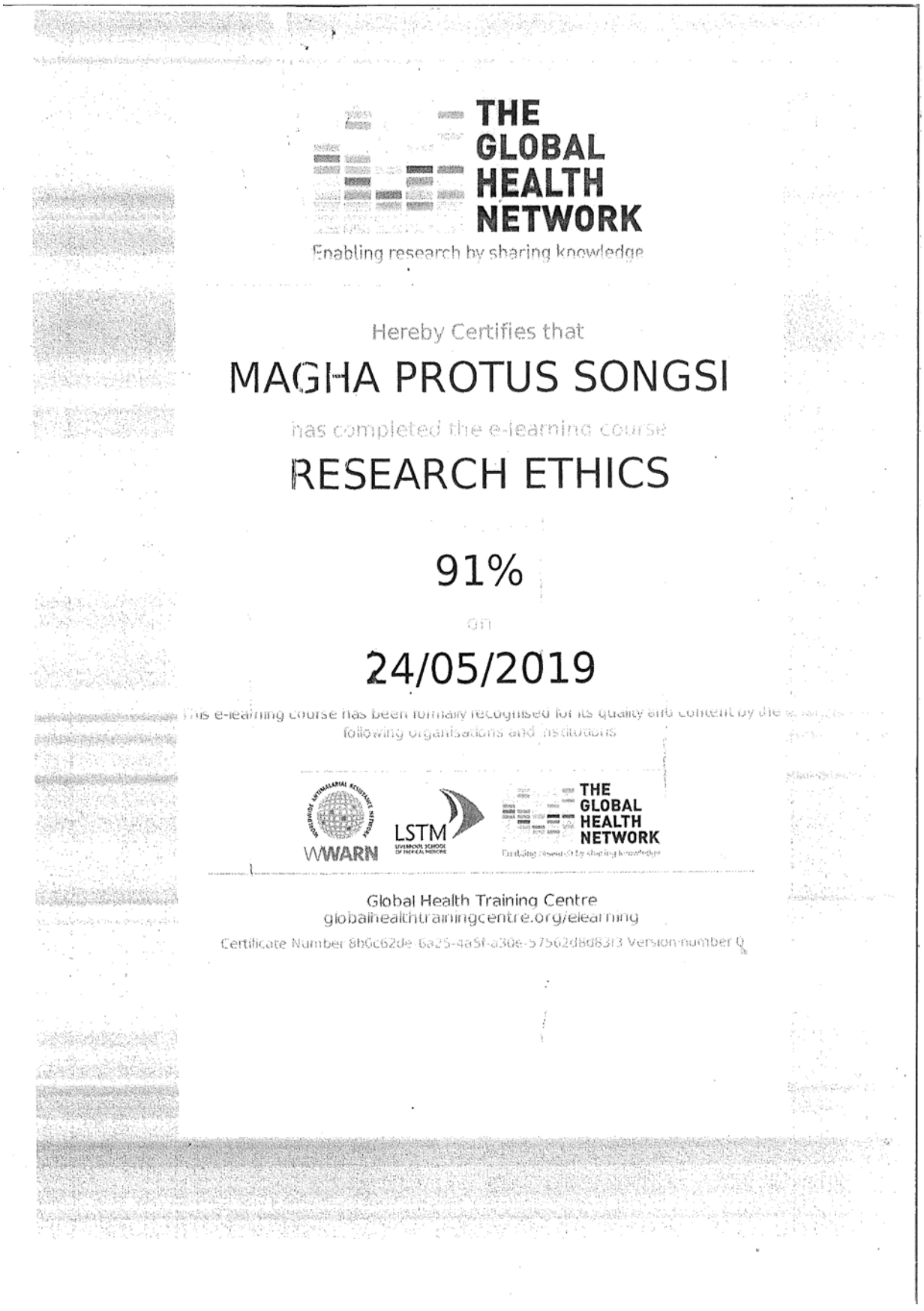
He is carrying out his research work in the view of preparing a Ph.D. precisely in the field of Psychometry. His work titled: **"The Effects of Internal Quality Assurance Strategies on Students' Academic Performance in the University of Yaounde 1"** under the supervision of **Maureen EBANGA TANYI** (Professor), University of Yaounde, working in co-supervision with **LAH LO-OH Joseph** (Associate Professor), The University of Bamenda.

I would be grateful if you provide him with every information that can be helpful in the realisation of his research work.

This authorization is to serve the concerned for whatever purpose it is intended to.

Done in Yaounde on 2 2 [illegible]

For the dean and by order



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