

## Total Quality Management and Institutional Effectiveness: A Survey of Private Colleges of Education in Kwara State, Nigeria

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### Abstract

This quantitative study inquired into the association between total quality management and institutional effectiveness of private colleges of education in Kwara State, Nigeria. The study was explanatory and correlational in nature. A sample of 736 study participants was sampled with multi-stage sampling procedure. Validated and trial tested instrument ( $r = .856$ ) titled: "Total Quality Management and Institutional Effectiveness Questionnaire Index" (TQMIEQI) was used for data collection. Mean scores and linear regression analysis were appropriately applied in analyzing the three research questions raised for the study. Findings revealed that private COEDs practiced TQM to a moderate extent ( $CM = 3.02$ ), while their level of effectiveness was also moderate ( $CM = 3.15$ ). Findings further proved that, TQM sub-scales of quality organizational development ( $\beta = .380, P < 0.05$ ), internal-external appraisal ( $\beta = .358, P < 0.05$ ) and student-oriented focus ( $\beta = .338, P < 0.05$ ) were positively related to IE, even as quality-orientated leadership ( $\beta = -.081, P < 0.05$ ) had significant but negative correlation with IE. The study concluded that, if private COEDs aspire to attain high level effectiveness, all the four studied TQM sub-scales must be highly adopted and practiced.

**Key words:** Institutional Effectiveness; Quality Internal-External Appraisal; Quality-Orientated Leadership; Quality Organizational Development; Quality Student-Oriented Focus

### 1. Introduction

Colleges of Education (COEDs) otherwise known as, teacher training institutes (TTIs) at present, is universally accepted as one of the key revolutionary agents for attaining sustainable human capital development. This is occasioned by their mandated responsibilities in equipping both pre-service and in-service teachers with the obligatory knowledge, intricacies or methodologies and expertise required to flourish in the 21<sup>st</sup> century didactic and wider community. In realization, governments of developed and developing nations (Nigeria inclusive) are establishing teachers training colleges to train prospective entrant and/or in-service educators into/in the teaching profession by offering Nigerian Certificate in Education (NCE), Bachelor of Education (B.Ed) and Post Graduate Diploma in Education (PGDE) programmes. Evidently, there are 81 government-

established COEDs (27 Federal and 54 State-owned) in Nigeria. Nonetheless, as a result of the geometric growth of admission demands by prospective pre-service and in-service educators year in year out, in which the available public COEDs cannot cope with, the government (Federal and State) encouraged private individuals or group of persons, or missionaries (Christians, Islamic Groups/organizations) or corporate entities/organizations in establishing COEDs, so as to cater for the high demands for teacher education. These private COEDs like their public contemporary are mandated to: improve teachers' dedication to the didactic profession; promote spirit of creativeness and innovation in teachers; turn out vastly induced, meticulous and resourceful classroom tutors for all levels of the educational system; supply tutors with the intellectual and professional background adequate for their profession and make them adaptable to changing situations; and help teachers to fit into social life of the community and the society at large and enhance

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their commitment to national goals (National Policy on Education, 2013, p. 39). These mandates as affirmed in the NPE (2013, p.36) are expected to be realized through: quality staff and students intake; quality or excellent teaching; quality research and innovation; provision of quality services, facilities and resources; quality and vigorous professional training programmes for teaching and non-teaching employees; delivering more practical-oriented curriculum that are significant to labour market needs; maintenance of minimum educational standards through appropriate supervisory bodies; and out-and-out services to the community through extramural and extension services.

The accomplishment of these mandates through the statutory guidelines prescribes institutional effectiveness, as Grdzeldze (2021) and Njoku (2020) affirmed that COEDs attain effectiveness when their aims and objectives are met by way of excellent teaching, research advancement, public service, responsiveness to students' academic demands, and organizational policies meeting statutory benchmarks and requirements for functional education delivery. It is however, deplorable that the effectiveness of most private COEDs in Nigeria today are in doubt, with regards to leadership deficiencies, calibre of staff recruited, quality and quantity of students admitted, lecture room size or lecturer-students ratio, career development opportunities availed to employees, adequacy of infrastructures/facilities that meets the required standards for programme accreditation as well as quality of instruction, research and public service. The countrywide (Nigeria) survey assessment of the educational sector carried out by the International Organization for Migration (IOM) in 2014 reported unmanageable lecturer-to-student ratio (ratios 1:242), extreme level of sub-quality research personnel, vague curricular, facilities shortfall, undisclosed quality assurance measures, unknown monitoring/evaluation system in addition to pedagogical deficiency, as challenges confronting most Nigerian private COEDs. It is also bothersome to note that many lecturers in private COEDs are deficient in assessment skills, didactic and ICT proficiencies (IOM, 2014), as a result of the impromptu and unorganized training programs, which are sometimes bedeviled with work-politics maneuvering (Godwin, Adeniran & Jamogha, 2020; Jimoh, 2019). Additionally, the controversies of curricula design, inventive practices, institutional vision, underprivileged conditions of work environment, paucity of teaching materials and physical infrastructures as well as poor access to research funds, and latest information technologies, equipment, and facilities needed to effectively discharge statutory tasks and duties are now major concerns of educators and students in most private higher institutions

(Oladimeji, Atunde, Abdulraheem, Medupin, Tijani, Oladejobi, Rilwan & Jesuwaye, 2021; Adebola, 2020; Sanz, 2018). Little wonder, IseOlorunkanmi, Rotimi, Adebola, Lawal, Henry and Adebisi (2021) observed that, in terms of quality and quantity, the programmes and services output of private COEDs in Nigeria was low, with most of them struggling to meet up with the statutory benchmark for effectiveness set by regulatory agency like National Commission for Colleges of Education (NCCE) and Quality Assurance Bureau. All these incongruity, which have made many education stakeholders and labour employers doubt the quality of TTIs programmes and its products, as observed by Adebola (2020), Johnson, Atunde and Olaniyi (2020), Kaur and Batra (2019), Mahamda (2019), Migide (2018), Gomes and Panchoo (2017) and Ogunnaike, Borishade, Adeniyi and Ezeugwa (2014) are multifaceted problems closely related to quality issues and anomalies. However, one achievable approach of enhancing the quality of education lies in the adoption and robust application of the principles of Total Quality Management (TQM) in the management of private COEDs. This implies that for effectiveness of private COEDs to be realized, adequate and proper application of TQM is required and must be practiced. Corroborating, Abd-Elal Nasr, El-Sayed and Mostafa (2021) maintained that TQM is the solitary gizmo that can augment the quality of services rendered by work organizations. This is because of its continuous improvement process used to effectively and resourcefully improve the worth of services delivered by institutions. Ejionueme and Oyoyo (2015) Muhammad and Rashid (2014) and Zabadi, (2013) amongst other scholars equally affirmed that TQM accentuates competence, inventiveness, dedication, solidarity, clients' fulfillment and how administrators/managers are anticipated to lead/direct, so as to gain the full prospects of staff(ers) in a work organization.

At this juncture, it becomes mandatory to conceptualize TQM and its sub-scales, so as to keep this research inquiry within a controllable level of operation. Various writers, scholars, and management experts have proffered diverse definitions of TQM in organizational behaviour literature, since it was earlier introduced in 1931 by Shewhart A. Walter in a research entitled "*Economic Control of Quality of Manufactured Product*", and subsequently re-invigorated in 1954 by Joseph M. Juran in a book titled "*What is Total Control? The Japanese Way.*" Total quality management, which was first applied by the manufacturing firms in the early 19th century, and later found its way to business entities and service organizations especially educational institutions, as observed by earlier management gurus like Rakesh and Shabarisha (2013), Van Bouwel and Veugeler

(2013), Mubaslat and Al-Tarawneh (2011), Kreitner and Kinicky (2011) and Murad and Rajesh (2010), is a client-minded philosophy and strategy which covers three basic terminology, namely total, quality and management. The word total as argued by Kreitner and Kinicky (2011) and Murad and Rajesh (2010) means every single individual in an organization are to make steady attempts towards the achievement of objective through organized efforts for enhancements; quality represents distinction in goods and services (Kreitner & Kinicky, 2011), particularly the degree these goods/services conform to stipulated prerequisites and satisfy clients (Mubaslat & Al-Tarawneh, 2011); and management means the governance strategy aimed at resourceful utilisation of resources in order to achieve an organisation's objectives (Rakesh & Shabarisha, 2013) through intermingling activities of organizing, planning, leading controlling, and directing (Todorut, 2013; Van Bouwel & Veugelers, 2013). Thus, TQM as postulated by Van Bouwel and Veugelers (2013) and other like-minders means efficiency through stringent acquiescence with devised policies and structures capable of realising critical managerial functions in an organisation. Similarly, Nwankwo (2014) described TQM as broad-spectrum management attitude and tools that permit institutions to pursue the attainment of quality, through continuous improvement of resources. In later years, educational researchers (Alzeaideen, 2019; Migide, 2018; Mumuni & Gabriel, 2017) viewed TQM as the application of all-inclusive managerial styles requiring the involvement of all members of an organization's workforce to develop all work processes within an organization so as to satisfy clientele (students) pressing and prospective needs. Similarly, Bibi, Waheed and Shehzadi (2021) and Kaur and Batra (2019) reiterated that, TQM is a de facto administrative belief to create organizational excellence which can provide students satisfaction. Chuktu (2021), Adebola (2020), Akbar, Ali and Alam (2019) and Milenkovska and Novkovska (2019) summarized that TQM is a quality improvement framework that involves doing the right things at all times, striving for continuous development, fulfilling clients' necessity, and ensuring service functionalism.

In a more elaborate and explicit expression, Abd- Elaal Nasr, El-Sayed and Mostafa (2021), Adebola (2020) and Kaur and Batra (2019) look at TQM as a management replica that emphasizes on the improvement of the quality of an organisation's output, including goods and services, through effectual internal practices such as communication, commitment, customer focus totality, collaboration, incessant progression, leadership, learning and development, self-assessment, and workers empowerment. Scholars like Bibi, Waheed and Shehzadi (2021), Adeoye (2019), Kistiani, and

Permana (2019), AbdulSalam, and Al-Salim (2018), Avila (2018) and Azhar (2018) further advocated that organizational headship, management commitment, cooperation, employees education, quality vision, continual improvement, employee involvement, recognition and reward, students' satisfaction, stakeholder's involvement, organizational culture are critical factors for TQM practices. Based on this suggestions in literature trends, the indicators of TQM was conceptualized into four sub-scales, namely; quality-orientated leadership (QoL), quality student-oriented focus (QSoF), quality organizational development (QOD) and quality internal-external appraisal (QIEA). This contextual categorization was borne out of the fact that they are the most important mainstays and practical tools of total quality management (Barone, 2022; Cabacang, 2021; Mahamda, 2019; Azhar, 2018), which are fundamental for attaining and surpassing immediate and impending students' needs/expectation. Also, most service organizations depend on these five TQM indices to ensure accountability, competency, commitment, competitiveness (Abd- Elaal Nasr, El-Sayed & Mostafa, 2021; Milenkovska & Novkovska, 2019), growth, survival and effectiveness in the short, medium and long-term.

The foundation of an effective TQM adoption and practices is quality-orientated leadership (Azhar, 2018; Milenkovska & Novkovska, 2019; Aziz, Mahmood & Bano, 2018; Qassim, 2017). It refers to College management commitment to strategic quality planning and modern leadership approaches in piloting and managing the organization's resources in such a way that makes them more competitive (Northouse, 2016; Lussier & Achua, 2015) in order to accomplish prescribed goal and objectives. The aim of QoL is to maximize both workforce and organization's potentials by allowing utmost involvement in decision making process, providing needed professional and social support (Aminu, 2013), encouraging cohesion, providing quality feedback (Nwankwo, 2014), laying down demanding goals, requesting performance progression (Lussier & Achua, 2015), and creating a revitalizing, resourceful, electrifying, and transformational workplace for staff(ers) to work in. The second essential TQM construct studied in the present research is quality student-oriented focus, which involves determining school customers (students, teachers, parents, stakeholders, communities) requirements (Migide, 2018) and offering them satisfactory services that meet or exceed their needs and expectations (Adeoye, 2019). Thirdly, quality organizational development is another core facet of TQM process. It involves the incremental changes and ongoing improvements of human, infrastructure, learning and ICT resources which allow institutions to operationally evolve and

sustain their competitiveness and functionalism amongst their counterparts locally and globally. Explicitly, QOD includes the continuous innovative education of staff, ensuring the existence of systems and process enhancement, constant quality audits (AbdulSalam & Al-Salim, 2018; Ravindran & Kamaravel, 2016) and benchmarking. Thus, QOD is a long-term procedure of a torrent of expansions and innovations integrated and realized in an organization's operational life. Quality internal-external appraisal otherwise known as following-up educational progression (AbdulSalam & Al-Salim, 2018; Ahmad, Abu, Almahyra & Abdelkareem, 2013) in literature is a central TQM tool in the attainment of COED goals and objectives. It is a the integration of processes and procedures through which COEDs seeks to ensure that programme quality is ensured, improved upon and maintained to an projected level according to the stipulated guidelines or benchmarks, which control the educational system. The essence of QIeA, as highlighted in the National Policy on Education (2014) is to ascertain quality control through habitual assessment, quality feedback and constant regulation of academic, instructional and other educational services, thereby increasing the standard of institutions and achieving educational goals.

It is however germane to note that, although the aforementioned four core TQM constructs (QoL, SSF, COD, OF and QIeA) individually or in its combination, could influence the effectiveness of private COEDs, if dutifully practiced (Chuktu, 2021; Adebola, 2020; Msallam, Al hila, Abu Naser & Al Shobaki, 2020; Alzeaideen, 2019; Mahamda, 2019; Qassim, 2017), the major anxiety of this present research is whether they are been practiced in private COEDs to attain high level of effectiveness. This is occasioned by the fact that, some private COEDs are still: stocked with the traditional approach of leadership; not meeting the desires of their students and the populace; obsolete and rustic in their mode of operation; managing incoherent workforce; and struggling to meet up with statutory benchmarks set by regulatory agencies to ensure qualitative education delivery. Literature evidence (Ogunode, Jegede & Abubakar, 2021) equally perceived that the quality of people handling the leadership position in some private COEDs are poor, as these colleges are been governed by professionally unqualified and incompetent individuals with minimum higher education qualifications like Bachelors Degree. Even the lecturers employed in some of these private COEDs are first degree holder (B.Sc/H.N.D) without any teaching qualifications (such as M.Ed, B.Ed, B.Sc Ed), while those with teaching qualifications are not duly registered with the Teachers Registration Council of Nigeria. For

admission into some private COEDs, it is like a garbage-in-garbage-out-syndrome, with prospective pre-service teachers not possessing the requisite Senior School Certificate Examination qualifications (i.e minimum of three credits and two passes including Mathematics and English Language). Oftentimes most of these candidates are asked to submit their results during or after completing their respective programmes. Situation like this, have lead to many private COEDs admitting pre-service teachers above their carrying capacity (Ogunode, Jegede & Abubakar, 2021), thereby raising the lecturer/ pre-service teachers ratio. Moreso, many private COEDs have shortage of academic personnel, while the available academic personnel are allotted high workload, as they teach an average of nine (9) courses per semester excluding other statutory tasks. This situation however, agitated the researchers in investigating the impact of total quality management on institutional effectiveness of private COEDs in Kwara State, Nigeria.

There are loads of pragmatic investigations globally, which largely focused on TQM prospects, practices, adoption, implementation and its barriers across multi-sectorial endeavours especially manufacturing, businesses, and service entities like educational institutions. As a case in point, Abd-Elaal Nasr, El-Sayed, and Mostafa's (2021) surveyed 103 nursing educators at Damanhour University, and found that aspects of administration, scientific research, the lecturers themselves, the faculty in which staff are working and community service are major impediments to TQM implementation in the study setting. The correlational study conducted by Bibi, Waheed and Shehzadi (2021) among 1,980 participants from Punjab's public sector universities discovered that TQM practices such as employees engagement, dissemination of vision, leadership participation, persistent improvement, restructuring and compensation, and education and training are highly implemented apart from participation of stakeholders and learners in quality enhancement process. The study also found positive and relative link connecting TQM practices implementation with performance of sampled universities in Punjab up to the value of 46%. In the same way, the research inquiry (Alzeaideen, 2019) involving 180 respondents found statistical significant impact of TQM on university performance in Jordan. The cross-sectional survey of 347 administrators and faculty members in nine Filipino tertiary institutions carried out by Cabacang (2021) confirmed that HEIs had a high degree of adoption on campus amenities ((M=4.24), top-management commitment (M=4.12), Teaching and Learning Delivery Modes ((M=4.12), system and process management ((M=4.12), linkages (M=4.10) and customer satisfaction (M=3.48). The study by

Cabacang (2021) however concluded that strategic planning and top management commitment as markers of TQM is appreciably more apparent in private-owned HEIs especially universities.

Findings from the descriptive analytical research carried out among 240 employees working in Gaza Strip university colleges by Msallam et al. (2020) reported that TQM requirements such as organizational building, constant improvement, senior managers commitment to TQM, focus on recipients, facts management, and employee empowerment were appropriately applied in the administration of University colleges in Gaza Strip. Result from a detailed case study research (Akbar, Ali & Alam, 2019) in Bahrain point out that educators not been sought before changes in curriculum were implemented and perception of students that university management are not concerned with facilities maintenance (shortage of sport facilities, inadequate training sessions, and poor maintenance of equipment) were identified as setback to TQM execution in the studied private university. Kaur and Batra (2019) assessed the perception of 260 faculty employees on the level of implementation of TQM among 55 tertiary institutions in Punjab. The investigators found that seven factors were extracted which were as top management, a system approach to management, customer satisfaction, employee involvement, training, team work, continuous improvement towards TQM in education sector of Punjab were moderately implemented. The qualitative study carried out at Universitas Pendidikan in Indonesia by Kistiani and Permana (2019) discerned that TQM is a vision, which the university can only accomplish in the course of long-term planning; and that, its continuous and consistent application will make higher institutions capable of winning competitive international competitions. Key findings from a quantitative research (Mahamda, 2019) engaging 33 deans of faculties in three Palestinian universities (Al-Quds University, An-Najah University and Birzeit University) showed that TQM indices (student-focus, leadership, human resource focus, strategic planning, process management, information and analysis, and performance results) was highly implemented at Birzeit University for all elements with (88%), followed by Al-Quds University (85%) and An-Najah University (77%) respectively. Mahamda (2019) further found that implementation TQM factors of information and analysis implementation (0.747), human resources factor (0.731) and student focus (0.604) had high correction with the performance; strategic planning, and leadership had moderate positive relationship with performance; and process management has weak positive relationship with performance.

Outcomes from the analytical descriptive survey (AbdulSalam & Al-Salim, 2018) of 52

University of Samarra staff in Iraq revealed statistically significant effect of total quality management dimensions (strategic planning, continuous development, employee participation and performance evaluation) on the institution's performance ( $\alpha = 0.002$ ) in terms of efficiency and effectiveness. The study by Avila (2018) which comprised 168 research participants from eight sampled universities in the Province of Quezon unraveled that: TQM (such as curriculum and instruction, human resources, physical facilities, budget allocation and research) were moderately practiced by administrators; and administrators are not very much adept with the application of TQM in the areas of research and budget allocation. Likewise, Avila (2018) found that, while TQM practices negatively affect the dropout rates, it had no significant relationship with enrollment, retention and graduation rates in the Universities. Aziz, Mahmood and Bano (2018) in their study proposed a conceptual framework for TQM based on its principles and process-based system approach. The qualitative study, which was conducted among nine University managers in both Public and Private Sector in Rawalpindi and Islamabad, found out that despite the fact that leadership, continuous improvement, teamwork and customers focus were the major TQM principles being practiced at HEIs, whereas only leadership, customers' focus and continuous improvement were to a great extent practiced in the institutions (Aziz, Mahmood & Bano, 2018). Aziz, Mahmood and Bano (2018) further discovered that attitude of university community, shortage of ownership and opposition to change for continuous improvement are the foremost stumbling blocks in implementing TQM principles by HEIs.

In another research, Qassim (2017) explored the perception of 135 educational leaders on TQM implementation in Qassim University in Saudi Arabia. Findings, as untangled by Qassim (2017) proved that, the out of the eight TQM principles studied, the application of administrative and financial affairs, organizational culture, faculty affairs, administrative leadership, strategic planning, human resources and student affairs, and feedback were medium level with the exclusion of academic affairs and the field of community service that were of high level. Finding by Abd El-Moneim and Al-Raoush (2015) also showed that TQM principles (leadership commitment to quality, customer focus, continuous improvement and employee involvement) had significant impact on the overall effectiveness ( $p < 0.05$ ) of hospitals in Jordan. Relatedly, Muhammad and Rashid's (2014) study results showed a significantly positive relationship between TQM practices (quality system and improvement, leadership, teachers' participation, student focus and process control) and teachers motivation with school image

intervening this relationship in Pakistan secondary schools. Result from the viewpoint of 366 faculty members (Ahmad, Abu, Almahyra & Abdelkareem, 2013) revealed that the extent at which Jordanian universities adopt TQM dimensions like creating total quality requirements (2.5241) and decision-making and community service (2.5121) were low, while those of follow-up of the educational process - learning development (2.7376) and human resource development (2.7294) were medium. Alnaweigah's (2013) survey of 159 full-time academics at Taif University found out that TQM practices had a positive correlation with the University's organizational change and development. Mohammed (2013) quantitative research based on the views of 35 educational supervisors observed that the significant degree of applying TQM criteria (teaching and learning, school administration, school activities and links with the community) on the effectiveness of public schools in Governorate of Jarash was high. Using the Exploratory Factor Analysis in ascertaining the extent to which TQM is implemented, Zubair (2013) concluded that overall TQM is being adopted in Pakistani Public Sector HEIs at a slower pace, and that areas of enhancement consist of student focus, vision ownership, employee training, leadership, process and continuous improvement, evaluation standardization.

Within the continent of Africa, studies on TQM and its impact on organizational performance are also on the rise in the last decade. In Nairobi City County of Kenya, Migide (2018) surveyed 679 private university employees (academic and non-academic), and established that excellence policies and goals were clearly devised and documented, and that significance differences do not exist between TQM practices of top management commitment ( $X^2 = 1.326$ ,  $p = .515$ ), customer focus ( $X^2 = 0.571$ ,  $p = .752$ ), employee empowerment ( $X^2 = 3.031$ ,  $p = .220$ ), continuous improvement ( $X^2 = 0.198$ ,  $p = .906$ ) and performance at the two studied private universities (Catholic University of Eastern Africa and KCA University). In another private sector mixed study conducted among 283 rectors and tutors in eight private schools, Gomes and Panchoo (2017) reported that despite the respondents convergent ideas, they agreed that education and training, customer orientation, top management and visionary leadership, reward and recognition, and continuous improvement in processes are the five critical TQM factors needed across Mauritius private secondary schools for the sustainability of quality education in order to leverage educational prospects. In the public sector, the theoretical and analytical review on TQM for heightening performance of three foremost Ghanaian universities (University of Cape Coast, University of Ghana and University of Science and

Technology) conducted by Mumuni and Gabriel (2017) wrapped up that though TQM framework such as ownership, vision, leadership, standardization, evaluation, employee training, continuous improvement and student focus were implemented amongst Ghanaian HEIs, it was at a dawdling pace, and these calls for advance improvement.

Findings from another country-like study (Abdul-Razak, Bawa, and Abdul-Razak (2014) carried out among 120 research participants from five (5) Junior High Schools showed that relegation of students, deferral of staff salaries, effectual supervision of teachers, observing students conduct and resourceful leadership approaches are vital strategies used by school administrators to ensure TQM of Chereponi district schools in Ghana. More so, Samanhyia, Arhin-Larbi, Adusei and Donbesuur's (2014) research discovered a positive correlation between TQM practices and academic performance of secondary school students in Ashanti Region of Ghana. Results from another allied descriptive study (Eshun, 2012) of 113 Ghana Senior High School made known that schools have institutionalized the custom of total quality, and teachers are healthily motivated, and these transmuted to high students scholarly performance in public examinations. Adopting the Crosby and Demings model of TQM, John (2012) surveyed 29 school heads and 226 educators in Murang'a East District, Murang'a County of Kenya, and found out that most schools were adhering to leadership, human resource, quality planning and employee empowerment principles to boost TQM. John's (2012) study further affirmed that though not all schools in Murang'a East district applied TQM principles; schools registering improvement in academic performances adhered to TQM principles, while those schools witnessing academic performance decline, slightly adhere to TQM.

In Nigeria, the census survey (Chuktu, 2021) of 246 principals discovered that TQM practices in areas of fund management and facilities/equipment management had significant link with institutional effectiveness indicators of organisational innovations, learning environment and learning outcome in public secondary schools in Cross River State. In Enugu State, the study (Ejionueme & Oyoyo, 2015) involving 358 administrators found that teamwork and total commitment were applied to a high extent, while effective communication was applied to a little extent in the administration of secondary schools in Umuahia Education zone. On the overall, Ejionueme and Oyoyo (2015) reported that TQM was applied to a little extent in school administration in the zone. The empirical analysis by Ogunnaike, Borishade, Adeniyi and Ezeugwa (2014) showed that TQM practices of quality input management, quality

output management and quality process management had significant association with perceived corporate image of private and public Nigerian universities. In Kwara State, where the present study was conducted prior researches also existed. Particularly, Adebola (2020) studied the perception of 390 lecturers and 400 students in 10 selected Universities in North-central, Kwara State inclusive and found that TQM metrics of students focus ( $\beta = 0.285, 0.267, \text{ and } 0.371$  respectively), continuous improvement ( $\beta = 0.229, 0.153, \text{ and } 0.482$  respectively), team work ( $\beta = 0.229, 0.153, \text{ and } 0.482$  respectively), leadership commitment ( $\beta = 0.046, 0.187, 0.346, 0.395 \text{ and } 0.222$  respectively) and innovative practices ( $\beta = 0.982, 0.689, \text{ and } 0.367$  respectively) were significantly related to quality of teaching, research output, community services and efficiency of academic staff in North-central Nigerian universities. Adeoye's (2019) survey of 358 secondary school employees in Ilorin West Educational zone found that teamwork (2.65) and total commitment (2.50) were highly applied in the administration of schools, while customers' satisfaction (2.41), effective communication (2.38), and continuous improvement (2.36) are lowly applied. On the overall, Adeoye's (2019) found low extent (2.48) of TQM application in school administration in the studied Education zone. In a study conducted in Ilorin Metropolis by Oduwaiye, Sofololuwe and Kayode (2012) using 120 participants, the researchers discovered that effective communication was implemented in the schools but school heads and trainers (teachers) were not re-trained on innovative techniques of school-based administration. The scholars further discovered a significant link between TQM and learners scholastic performance.

The appraisal of the foregoing empirical parlances confirmed the predominance of TQM studies adopting some of the study indicators in manufacturing, health, business, fast consumer moving goods organizations, banking, tourism and HEIs especially universities in both developed and developing nations but its impact on effectiveness of private COEDs remain anonymous. As well, incongruities on the confederacies of TQM indexes among scholars and experts called for synchronization in various field of endeavours as differential in TQM metrics exist across various sectors and even in the same sector. Moreso, the level at which private COEDs are effective as related to TQM adoption has not been empirically proofed.

Copious theories and frameworks have also been utilized to elucidate the hypothetical linkage

between TQM and organizational efficiency, effectiveness, performance and successes. Remarkably are the Quality Management System Theory (Todorut, 2013), system theory (Ogunnaike, Borishade, Adeniyi & Ezeugwa, 2014), Human Capital Theory, Deming Quality Improvement Theory, Resource-Based View Theory, Stakeholders' Theory, Theory of Excellence (Alzeaiden, 2019; Milenkovska & Novkovska, 2019; Migide, 2018; Hickman & Mesut, 2017), Statistical Quality Control theory, Institutional Theory and Social Technical System Theory (Adeoye, 2019; Manarbek, Kondybayeva, Doszhan, Turarov & Abylay, 2020). Regardless of the usefulness of these theories, the theoretical ideology of the present study rest on the Walter Shewhart Statistical Quality Control Theory (SQCT) postulated in 1990. SQCT, which focuses on institutional successes, and its attainment through the use of statistics in identifying quality areas for improvement (Hickman & Mesut, 2017; Ravindran & Kamaravel, 2016). Reiterating on SQCT in tandem to institutional effectiveness, Adeoye (2019) argued that effectiveness can be enhanced, when organizations: provide strategic leadership; deliver services to meet customers (students) expectation; continuously improve their mode of operation; encourage synergism between superiors and subordinates; and availed itself for assessment internally and externally. These conditions observed by Adeoye (2019) in line with SQCT are major principles, TQM is build upon. This however informs the tenet of the present study, as TQM practices in relation with institutional effectiveness of private COEDs will be established through statistical data. In view of the lacuna this study intends to fill, a conceptualized framework was designed and developed (see Figure 1).

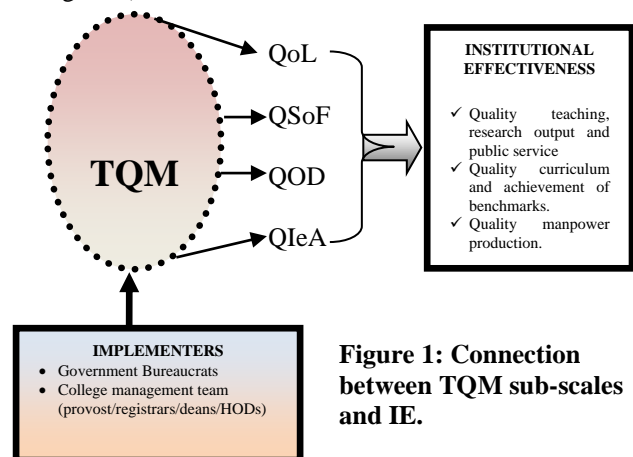


Figure 1: Connection between TQM sub-scales and IE.

The conceptual framework model in Figure 1 depicts the relationship between Total Quality Management (TQM) and institutional

effectiveness. From the diagram, TQM which is a stratagem for institutional excellence consists of quality-orientated leadership, quality student-oriented focus, quality organizational development, and quality internal-external appraisal. These TQM components, when applied to the College administrative system will result to quality and purposeful education, which will later metamorphose into institutional effectiveness in terms of quality teaching, research output and public service, as well as quality curriculum and manpower production. However, the application and practice of these TQM components rest on government Bureaucrats (officials of NCCE, Ministry of Education) and the College management who are the leadership team in the administration of COEs. In view of the foregoing conceptual illustration and study objectives, three research questions (RQs) were raised as follows;

1. To what extent are TQM sub-scales of QoL, QSoF, QOD and QIeA practiced in private COEDs in Kwara State, Nigeria?
2. What is the level of institutional effectiveness of private COEDs in Kwara State, Nigeria?
3. What are the significant contributions of TQM sub-scales of QoL, QSoF, QOD and QIeA to the level of institutional effectiveness of private COEDs in Kwara State, Nigeria?

## 2. Methodology

The research design adopted for this study is a descriptive research of a correlational type. This type of design is primarily concerned with ascertaining or illuminating associations between variables and it as well assists researchers to forecast potential trends of study indices. This research design was adopted because the study aims at determining the degree of association between the independent (TQM) and dependent (institutional effectiveness) variables of the study. The study location is Kwara State, which is geographically located in North-central region of Nigeria. In the study area, there are nine private COEDs. There are: Adesina College of education (ADECOED), Share; College of Education, (NAMCOED), Ilorin; and PAN African College of Education (PAN-AFR COE), Offa. Thus, the study targets 1,412 participants in the nine private COEDs, encompassing 643 teaching, 335 non-teaching, 328 management staffers (nine Provosts, 18 Deputy Provosts, nine Registrars, 27 Deputy Registrars, nine Bursars, nine Librarians, 41 Deans of Schools and 206 heads of departments) as well as 106 Key Officials of Ministry of Tertiary Education (monitoring and quality assurance units)

Ilemona (COEILEMONA); ECWA College of Education (ECWACOE), Igbaja; Kinsey College of College of Education (MCOED), Ilorin; Nana Ishiat Memorial College of Education in Kwara State, Nigeria (observe Table 1).

**Table 1.** Distribution of Study Population

Private COEDs	Management Staff	Teaching staff	Non-teaching staff	Key Officials of MTE
ADECOED	35	68	33	
COEILEMONA	38	76	36	
ECWACOE	36	73	35	
KINCOE	39	87	58	106
LGCOE	32	55	28	
MCOE	36	71	31	
MCOED	39	84	44	
NAMCOED	37	67	37	
PAN-AFR COE	36	62	33	
<b>Total</b>	<b>328</b>	<b>643</b>	<b>335</b>	<b>106</b>

Source: 2022 Field Survey.

From this target population, the non-probability and probability sampling techniques were mutually applied respectively to choose the representative sample. Explicitly, six fully accredited and operational private COEDs, which includes: Adesina COE, Share; College of Education, Ilemona; ECWA COE, Igbaja; Life Gate College of Education, Asa; Moje COE, Erin-Ile; and PAN African COE, Offa ([www.nceonline.edu.g/colleges.php](http://www.nceonline.edu.g/colleges.php)) were chosen purposively. Afterward, 736 respondents, comprising 170 management staff, 324 teaching staff, 157 non-teaching staff and 85 key MTE officials were picked using the proportionate stratified random sampling procedure. Distinctively, 80% of the targeted population were correspondingly sampled (observe Table 2). The sample size chosen allies with Creswell and Creswell's (2018), Nardi's (2018) and Neuman (2014) proclamation about the rule of thumb that a minimum of 60 - 80% sample size can be made use of for target population of 2,000 and below. This is dependent on the fact that, the sampled population are controllable, easily reached and will not generate cost difficulty.

Education (KINCOE), Fate, Ilorin; Life Gate College of Education (LGCOE), Asa; Moje College of Education (MCOE), Erin-Ile; Muyideen

**Table 2.** Distribution of Sampled Participants

Sampled COEDs	MS (80%)	TS (80%)	NTS (80%)	Total	MTE (80%)
ADECOED	28	54	26	108	
COEILEMONA	30	61	29	120	
ECWACOE	29	58	28	115	85
LGCOE	26	44	22	92	
MCOE	29	57	25	111	
PAN-AFR COE	29	50	26	105	
<b>Total</b>	<b>170</b>	<b>324</b>	<b>157</b>	<b>651</b>	<b>651 +</b>

Sampled COEDs	MS (80%)	TS (80%)	NTS (80%)	Total	MTE (80%)
Population					85 = 736

Source: Researchers Survey

Key: MS = Management Staff, TS = Teaching staff, NTS = Non-Teaching staff

For data gathering and collection, the study made use of a 36-item 5 point Likert scale questionnaire titled: "Total Quality Management and Institutional Effectiveness Questionnaire Index" (TQMIEQI). The measuring instrument (TQMIEQI), which was designed based on varied extracts of preceding TQM investigations was structured on Strongly Agree (SA) = 5 points, Agree (A) = 4 points, Disagree (D) = 3 points, Strongly Disagree (SD) = 2 point and Undecided (UN) = 1 point. The instrument consists of three (3) sections. Section A contained personal data of the respondents, section B consist of 24 items related to the five sub-scales of the studied independent variables (TQM), while section C consists 12 items relating to institutional effectiveness of COEDs. To ensure the measuring instrument's measurability, it was given to three connoisseurs in the fields of Business and Educational Management. These connoisseurs checked its significance, content aptness, item depth and study indicators representativeness. For dependability of the measuring instrument, a pilot study was conducted on 40 adhoc participants drawn outside the sampled Colleges. Responses were coded, imputed and analysed with Cronbach Alpha ( $\alpha$ ) using SPSS 20.0 statistical software. Overall reliability co-efficient of .856 was achieved (observe Table 3), which point towards high degree of TQMIES's reliability (Nardi, 2018; Leavy, 2017; Creswell, 2014).

Table 3. TQMIEQI Reliability Index

S/N	Variables	N of Items	Cronbach's Alpha
1	TQM Sub-scales		
a.	QoL	6	.914
b.	QSoF	6	.857
c.	QOD	6	.881
d.	QIeA	6	.802
2	IE	12	.824
	<b>Overall Reliability Coefficient</b>	<b>36</b>	<b>.856</b>

Before the administration, an approval letter was collected from the Kwara State Ministry of Tertiary Education in order to get entrée to the selected Colleges as well as mutual aid from the respondents. Thereafter, the proper questionnaire administration was carried out on 736 study participants. This process produced a response rate of 96.7%, as 712 retrieved questionnaires were filled appropriately. For analysis, descriptive

statistics such as mean scores was purposely used to analyse the RQs 1 and 2, whereas linear multiple regression analysis was applied in analysing the third RQ.

### 3. Results and Discussions

Based on the collected data and applications of appropriate statistical tools in line with the RQs, results obtained in this study were presented in Tables 4, 5, 6 and 7 respectively.

Table 4. Extent TQM sub-scales were practiced among Private COEDs in Kwara State

S/N	Items	Mean	Decision
<b>Quality-orientated leadership</b>			
1	Our college management team (provost/registrars/deans) periodically design, implement and conveys quality assurance goals and policies in the College.	3.15	ME
2	Our provost/registrar/deans/HODs uses management approach that allows for participation, job autonomy, open discussions, feedbacks and ideas from staff towards the achievement of institutional goal.	3.26	LE
3	Our provost/registrar/dean/HODs encourage a workplace that fosters teamwork and collaborative projects where staffs share ideas, pool knowledge and resources.	3.19	ME
4	Staffers are provided with strong social and professional support by the provost/registrars/deans/HODs while discharging their statutory task and duties in our College.	3.42	LE
5	Our college management (provost/registrars/HODs) at all time sets challenging goals and ensures that high standards for work performance are met by staff(ers).	3.31	ME
6	All members of our college management team (provost/registrars/HODs) are committed to good governance, accountability and transparency to stakeholders.	3.21	LE
	<b>CLUSTER MEAN</b>	<b>3.26</b>	<b>LE</b>
<b>Quality Student-oriented Focus</b>			
7	Orientation and placement programmes are conducted for new students in such a way that staffers in our College are involved.	3.11	ME
8	Members of our College management team and lecturers have excellent relations and rapports with the students concerning matter that affect	3.37	ME



S/N	ITEMS	Mean	Decision	S/N	ITEMS	Mean	Decision
	profession.				last 5 years.		
27	NCE students perform excellently and are graduating with at least Credit grades in the last 5 years.	3.74	Moderately Effective	34	Annually organizes community oriented workshops and seminars in the last 5 years	2.76	Lowly Effective
28	Recorded good performances in sporting activities and academic competitions in the last 5 years.	2.88	Lowly Effective	35	In the last 5 years produced high quality graduates who are job ready in terms of high employers demand and contribute to solving society's challenges.	3.65	Moderately Effective
29	Has increased numbers of research outputs/publications in the last 5 years.	3.82	Moderately Effective	36	Highly ranked with other COEDs both locally and internationally in the last 5 years	2.83	Lowly Effective
30	Staffers (teaching and non-teaching) periodically attend key national and international conferences and workshops to deliver papers/write-ups in the last 5 years.	2.93	Lowly Effective	<b>GRAND MEAN</b> <b>3.15</b> <b>ME</b>			
31	Secured partnerships, alliances, and collaborations with other local and international institutions in the last 5 years.	2.71	Lowly Effective	<b>Source:</b> 2022 Field Survey			
32	Has high job satisfaction and retention rate amongst its staffers in the last 5 years.	2.80	Lowly Effective	<b>Key:</b> 4.01 - 5.00 = Highly Effective (HE) 3.00 - 4.00 = Moderately Effective (ME) 1.00 - 2.99 = Lowly Effective (LE)			
33	Students highly satisfied with the College's quality of educational services in the	2.79	Lowly Effective	General analysis in Table 5 indicates that the level of effectiveness among private COEDs in Kwara State was moderate (GM = 3.20) based on the criterion scores.			

**Table 6.** Regression Output showing the contributions of TQM constructs to IE

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991 <sup>a</sup>	.983	.983	1.73234

a. Predictors: (Constant), QIeA, QoL, QSoF, QOD

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	120481.407	4	30120.352	10036.725	.000 <sup>b</sup>
	Residual	2121.717	707	3.001		
	Total	122603.124	711			

a. Dependent Variable: IE

b. Predictors: (Constant), QIeA, QSoF, QoL, QOD

<b>Coefficients<sup>a</sup></b>						
Model	Unstandardised coefficients			Standardized coefficients	t	Sig.
	B	Std. Error	Beta			
	(Constant)	.493	.203		2.421	.016
	QoL	-.151	.067	-.081	-2.265	.024
1	QSoF	.635	.091	.338	6.977	.000
	QOD	.749	.098	.380	7.641	.000
	QIeA	.667	.083	.358	8.080	.000

a. Dependent Variable: IE

Regression summary from Table 6 showed that, the four TQM sub-scales taken together contributed 98.3% (R-square of .983) to IE of private COEDs, while other factors not studied might account for the remaining 1.7%. To discover the investigative

aptitude of the TQM sub-scales with IE, an analysis of variance was computed, and result proved that TQM practices had significant connection with IE of private COEDs (F = 10036.725; df = 4 and 707; p = .000). In view of this, the contributions of each

TQM constructs were ascertained with Beta coefficients computation, and outcome showed that QOD ( $\beta = .380$ ,  $p < 0.05$ ), QIeA ( $\beta = .358$ ,  $p < 0.05$ ) and QSoF ( $\beta = .338$ ,  $p < 0.05$ ) were positively related to IE, while QoL ( $\beta = -.081$ ,  $p < 0.05$ ) had significant but negative relationship with IE. Summarily, based on the standardized beta, the main TQM sub-scale that influenced the variance in institutional effectiveness is quality organizational development.

Finding from the first RQ revealed that both quality orientated leadership and students-oriented focus of the studied TQM sub-scales were moderately practiced in private COEDs in Kwara State. This finding, which was not surprising, considering the incessant complaints of staffers and students over unmet needs over the years, as a result of prevalent leadership-related anomalies in most private COEDs tallies with studies carried out in India (Kaur & Batra, 2019), Saudi Arabia (Qassim, 2017) but contradicts those of Cabacang (2021), Aziz, Mahmood and Bano (2018) and Mahamda (2019) who found that leadership and customer satisfaction were implemented at an higher extent among institutions of higher learning (IHLs) in Filipino, Pakistan and Palestine respectively. This finding also negates other Nigerian studies conducted respectively in Ilorin (Adeoye, 2019) and Umuahia (Ejionueme & Oyoyo, 2015) who found that, customer satisfaction and effective communication were lowly applied in managing school operations. Moreso, the present research reported that TQM sub-scales of quality internal-external assessment and organizational development QOD were practiced to a low extent among private COEDs. This finding is in line with Jimoh's (2019) as well as Oduwaiye, Sofololuwe and Kayode's (2012) observations that in most teacher training colleges staff are oftentimes not availed with quality development programmes, existing facilities are not improved upon while parameters of organizational appraisal are sometimes non-existence. This is situation can be detrimental to the attainment of qualitative and functional teacher education delivery, if robust improvement are not adopted and implemented by all College stakeholders. This finding therefore contradicts other international studies (Bibi, Waheed & Shehzadi, 2021; Msallam et al., 2020; Avila, 2018; Mumuni & Gabriel, 2017; Ahmad, Abu, Almahyra & Abdelkareem, 2013) who found that TQM constructs like creating total quality requirements, following-up the educational practice and organizational progression were moderately and highly practiced among Indian, Palestinian, Philippians, Ghanaian and Jordanian higher institutions. In broad-spectrum, the extent of EQM practices among private COEDs in Kwara State was moderate. This finding which also need

improvement contradicts those reported by studies conducted in Pakistan (Zubair, 2013), Kenya (John, 2012), and other parts of Nigeria (Adeoye, 2019; Ejionueme & Oyoyo, 2015) who found non-application of TQM in school management.

Result from the second RQ showed that moderate level of IE of private COEDs in Kwara State was moderate. This is reminiscent of the moderate level of effectiveness in areas of increased numbers of research outputs/publications ( $M = 3.82$ ), excellent performance with at least Credit grades ( $M = 3.74$ ) and producing high quality graduates who are job ready ( $M = 3.65$ ) found in Table 5. Also, the studied private COEDs were lowly effective in terms of: staffers delivering quality papers/write-ups in national and international conferences ( $M = 2.93$ ); increased enrolment of quality students' ( $M = 2.90$ ); excelling in sporting and academic competitions ( $M = 2.88$ ); attaining higher ranking amongst its peers ( $M = 2.83$ ); achieving high job satisfaction and retention rate amongst staffers ( $M = 2.80$ ); Students been satisfied with quality of educational services ( $M = 2.79$ ), organizing community oriented workshops annually ( $M = 2.76$ ); and securing partnerships with other institutions ( $M = 2.71$ ). This result is a reflection of the poor leadership attitude/approaches (Abd-Elaal Nasr, El-Sayed & Mostafa, 2021; IseOlorunkanmi et al., 2021; Lussier & Achua, 2015), stagnated development of infrastructural and human resources (Oladimeji et al., 2021; Johnson, Atunde & Olaniyi, 2020), resistance to change for continuous progression (Msallam et al., 2020; Aziz, Mahmood & Bano, 2018) and pitiable assessment techniques (Ogunode, Jegede & Abubakar, 2021; IOM, 2014), which are occasioned by the extent TQM subscales like quality leadership, students focus, organizational development, and assessment, were implemented or practiced by managers in the management of private COEDs. This finding tallied with those reported by Njoku (2020) in Nigeria but disagree with that of Avila (2018) who discovered high effectiveness among higher institutions in Quezon Province in Philippines.

Results from the third RQ showed that TQM practices had significant connection with IE of private COEDs ( $F = 10036.725$ ). Specifically, TQM sub-scales of QOD ( $\beta = .380$ ), QIeA ( $\beta = .358$ ) and QSoF ( $\beta = .338$ ) had significant positive relationship with IE, whilst QoL ( $\beta = -.081$ ,  $P < 0.05$ ) was negatively related to IE. The implication of this finding is that the higher the extent TQM principles of quality organizational development, internal-external assessment, students-oriented focus and leadership are adopted, implemented and practiced in private COEDs, the higher their level of institutional effectiveness. Reinforcing this, scholars like Barone (2022),

Cabacang (2021), Milenkovska and Novkovska (2019) and Azhar (2018) affirmed that organizations that provide strategic leadership, continuously develop their operational procedures, focus on quality customer services and continuously appraise its organizational activities, are creating a platform for higher individual and organizational performances that is flexible, resourceful and most notably, effective. And that, on the long-run, those organizations will be able to continuously compete effectively in the present competitive and knowledge-based global education domain. This finding thus, confirms and supports other world-wide researches (Bibi, Waheed & Shehzadi, 2021; Chuktu, 2021; Adebola, 2020; Alzeaideen, 2019; Mahamda, 2019; AbdulSalam & Al-Salim, 2018; Migide, 2018; Abd El-Moneim and Al-Raoush, 2015; Ejionueme & Oyoyo, 2015; Abdul-Razak, Bawa & Abdul-Razak, 2014; Muhammad & Rashid, 2014; Ogunnaike, Borishade, Adeniyi & Ezeugwa, 2014; Samanhyia, Arhin-Larbi, Adusei & Donbesuur, 2014; Mohammed, 2013; Eshun, 2012; Oduwaiye, Sofololuwe & Kayode, 2012) who reported similar results. Contradictorily, the study by Avila (2018) discovered non-existence of relationship between TQM practices and organizational performance indicators of enrollment, retention and graduation rates among teacher education institutions in Philippines.

#### 4. Conclusion

There is no reservation that, to achieve and enhance higher level of effectiveness of educational organization especially private COEDs, it is crucial that TQM sub-scales of quality-orientated leadership, quality student-oriented focus, quality organizational development and quality internal-external appraisal must be put in place and highly practiced to ensure that educators, students and College management are guided towards the desired goals and objectives of the institution. As a result of this, all the studied sub-scales of TQM should be dutifully practiced when managing the day-to-day academic, administrative and operational activities, as each sub-scale has the tendency to improve the institutional effectiveness of private COEDs in Kwara State, Nigeria. It is also essential that these TQM sub-scales be adopted as a 'quality management model' in all private COEDs and other institutions of higher learning at large. Also, the effects of other TQM indices like management commitment, organizational culture, employees' collaboration and empowerment on IE not studied in this research should be looked into by future researches. Furthermore, a replica study should be carried out in other States of the federation to enhance results generalizability.

#### References

- Abd- Elaal Nasr, M.M., El-Sayed, N.M. & Mostafa. W.H. (2021). Obstacles of implementing total quality management at Faculty of Nursing, Damanhour University. *International Journal of Novel Research in Healthcare and Nursing*, 8(2), 312-325.
- Abd El-Moneim A. E. & Al-Raoush, A.T. (2015). The impact of applying total quality management principles on the overall hospital effectiveness: An empirical study on the HCAC accredited governmental hospitals in Jordan. *European Scientific Journal*, 11 (10).
- Abdul-Razak, T., Bawa, M.W. & Abdul-Razak, A. (2014). Assessment of the effects of total quality management on school performance in the Chereponi Education Directorate. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 1 (5), 294-308.
- AbdulSalam, A. & Al-Salim, A. (2018). Total Quality Management: Its Impact on the Performance of Educational Institutions. *International Journal of Scientific and Research Publications*, 8 (8), 239 - 247. <http://dx.doi.org/10.29322/IJSRP.8.8.2018.p8029>
- Adebola, D.E. (2020). *Impact of total quality management practices on academic staff performance in selected universities in north-central, Nigeria [Ph.D. thesis]*. University of Ilorin, Ilorin. Nigeria.
- Adeoye, M.A. (2019). *Appraisal of the Application of Total quality Management in Secondary School Administration in Ilorin West Education Zone [M.ED thesis]*. National Open University of Nigeria, Abuja.
- Ahmad, M., Abu, M., Almahyra, M. & Abdelkareem, W. (2013). The Total Quality Management in the Jordanian Universities. *European Journal of Business and Management*, 5 (9), 1 – 13.
- Akbar, M.A., Ali, M.H. & Alam, S.S. (2019). Total Quality Management System in an Education Environment: The Case of a Private University in Bahrain. *Journal of Reviews on Global Economics*, 2019, 8, 717-729 717
- Alnaweigah, A.B. (2013). Total quality management role in organizational change and development - Case Study: Taif University. *International Journal of Business Administration*, 4 (4), 55-67.
- Alzeaideen, K. (2019). The Effect of Total Quality Management on University Performance in Jordan. *International Journal of*

- Financial Research, 10 (6), 283 – 297. <https://doi.org/10.5430/ijfr.v10n6p283>
- Aminu (2013). Human resource management. Kano: Benchmark Publishers Limited. ISBN: 978-188-227-1
- Avila, L.B. (2018). Total Quality Management (TQM) Practices of School Administrators in Relation to School Performance among Teacher Education Institutions in the Province of Quezon. In *4th International Research Conference on Higher Education*, KnE Social Sciences, pages 879–890. DOI 10.18502/kss.v3i6.2426
- Azhar, I. (2018). The implementation of total quality management in fostering Islamic higher education. *Madinah: Jurnal Studi Islam*, 5 (1), 1 – 29.
- Aziz, S., Mahmood. M. & Bano, S. (2018). Total Quality Management: A Frame Work for Higher Education Institution. *Journal of Research in Social Sciences*, 6 (1), 124 – 136.
- Barone, A. (2022, August 16). What is to total quality management (TQM), and why is it important? Investopedia. Available online at: <https://www.investopedia.com/terms/t/total-quality-management-tqm.asp>
- Bibi, H., Waheed, A. & Shehzadi, K. (2021). Total Quality Management Implementation and Performance of Public Sector Universities in Pakistan. *Pakistan Social Sciences Review*, 5 (2), 309-319.
- Cabacang, G.S. (2021). *Quality is Never an Accident: A Survey on the Total Quality-Management Practices amongst Selected Higher Education Institutions in the Philippines*. *International Journal of Learning, Teaching and Educational Research*, Vol. 20, No. 10, pp. 23-41, October 2021 <https://doi.org/10.26803/ijlter.20.10.2>
- Chuktu, O. (2021). Total Quality Management (TQM) Practices and Institutional Effectiveness of Secondary Schools in Cross River State, Nigeria. *European Journal of Scientific Research*, 158 (4), 288 – 298. <http://www.europeanjournalofscientificresearch.com>
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Thousand Oaks, California: SAGE Publications, Inc.
- Creswell, J. W. & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches (5th ed.)*. Thousand Oaks, CA: Sage.
- Ejionueme, L.K. & Oyoyo, A.N. (2015). Application of total quality management (TQM) in secondary school administration in Umuahia Education Zone. *Journal of Education and Practice*, 6 (27), 102-11.
- Eshun, S. (2012). *Assessing the impact of quality management on staff performance at Ghana senior high school [Unpublished M.B.A. thesis]*. Institute Of Distance Learning, Kwame Nkrumah University of Science and Technology.
- Federal Republic of Nigeria (2013). *National policy on education*. Abuja: NERDC
- Godwin, L.S., Adeniran, P.O. & Jamogha, O. (2020). Influence of staff training and development on employee performance in selected university libraries in South-West, Nigeria. *International Journal of Library and Information Science Studies*, 6 (3), 25-38
- Gomes, T. & Panchoo, S. (2017). TQM in Private Secondary Education in Mauritius. *International Journal of Innovation and Research in Educational Sciences*. 4 (4), 421 – 432.
- Grdzeldize, T. G. (2021). Measuring and improving institutional effectiveness and establishing quality culture at universities through rigorous data collection and weighted indicators (Case of Georgia, Tbilisi State University), INTED2021 Proceedings, pp. 154-163.
- Hickman, L. & Mesut, A. (2017). Stakeholder Theory: Implications for Total Quality Management in Higher Education. In *Fourth International Conference on Lean Six Sigma for Higher Education, May 25–26, 105–109*. West Lafayette, IN: Purdue University.
- International Organization for Migration (2014). *Promoting Better Management of Migration in Nigeria: needs assessment in the Nigerian education sector*. Abuja, Nigeria: International Organization for Migration
- IseOlorunkanmi, J.O., Rotimi, M.E., Adebola, G.O., Lawal, A.I., Henry, N.C. & Adebisi, T. (2021). Challenges in Nigeria’s education sector and the migration of Nigerian postgraduate students to South African universities. *Cogent Social Sciences*, 7 (1), 1890897. <https://doi.org/10.1080/23311886.2021.1890897>
- Jimoh, K.I. (2019). *Training, job commitment and effectiveness of non-academic staff in colleges of education in North-central, Nigeria [Ph.D thesis]*. University of Ilorin, Ilorin, Nigeria.
- John, I.J. (2012). *Role of total quality management in the academic performance of students in secondary schools in Murang’a East*

- District, Murang'a County, Kenya [Unpublished M.Ed thesis]. Mount Kenya University, Kenya.
- Johnson, B., Atunde, M.O. & Olaniyi, K.A. (2020). Strategies for improving the quality of education in contemporary Nigeria. *Journal of Education, Science, Vocational and Language Research*, 3 (1), 272 – 285.
- Kaur, S. & Batra, R. (2019). Assessing Faculty Perception towards Total Quality Management of Education Sector In Punjab. *International Journal of Recent Technology and Engineering (IJRTE)*, 8 (3), 7832 – 7843. DOI:10.35940/ijrte.C6034.098319
- Kistiani, D.P. & Permana, J. (2019). The Importance of Application Total Quality Management at Higher Education. *Advances in Social Science, Education and Humanities Research*, volume 400, 177 – 180.
- Kreitner, R. & Kinicky, A. (2011). *Organisational behaviour*. New York: McGraw-Hill.
- Leavy, P. (2017). *Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York, NY: The Guilford Press
- Lussier, R. N. & Achua, C. F. (2015). *Leadership: theory, application and skill development*. (5th ed.). Minnesota: Thomson South-Western.
- Mahamda, M.K. (2019). Implementation of Total Quality Management(TQM) in Palestinian higher education institutions (Birzeit University, An- Najah National University, Al-Quds University) and its relationship to the institutions' performance. *IOSR Journal of Business and Management (IOSR-JBM)*, 21 (7), 65-82. DOI: 10.9790/487X-2107046582
- Migide, E.S. (2018). *Total quality management practices on performance of selected private universities in Nairobi City County, Kenya [MBA Thesis]*. Kenyatta University, Kenya.
- Milenkovska, B. & Novkovska, B. (2019). How to Build Total Quality Management System for Higher Education in a Small Country. *UTMS Journal of Economics* 10 (2): 227–235.
- Mohammed H.J. (2013). Impact degree of the total quality management on the public schools effectiveness in the governorate of Jarash as viewed by the educational supervisors. *European Scientific Journal*. 9 (4), 180-193.
- Msallam, A.A., Al hila, A.A., Abu Naser, S.S. & Al Shobaki, M.J. (2020). The Reality of Achieving the Requirements of Total Quality Management in University Colleges. *International Journal of Academic Management Science Research (IJAMSR)*, 4 (8), 67-90.
- Mubaslat, M.M. & Al-Tarawneh, H.A. (2011). The Implementation of Total Quality Management (TQM) On the Higher Educational Sector in Jordan. *International Journal of Industrial Marketing*, 1 (1), 1 – 10.
- Muhammad, A. & Rashid, Z. (2014). Impact of TQM on teacher's motivation: Evidence from Pakistan. *Information and Knowledge Management*, 4 (11), 113-120.
- Mumuni, B.Y. & Gabriel K.A. (2017). Total Quality Management (TQM): A Continuous Improvement Framework for Boosting Higher Education in Ghana. *International Journal of Education and Evaluation*, 3 (11), 112 – 131.
- Murad, A. & Rajesh, K.S. (2010). Implementation of total quality management in higher education. *Asian Journal of Business Management* 2(1), 9-16
- Nardi, P. M. (2018). *Doing survey research: A guide to quantitative methods*. Routledge.
- Neuman, W. L (2014). *Social Research Methods: Qualitative and quantitative approaches (7th Ed.)*. Essex, England: Pearson Education Limited.
- Njoku, I. C. (2020). *Crisis management strategies and organizational effectiveness of colleges of education in South-eastern Nigeria [PhD Thesis]*. University of Ilorin, Nigeria
- Northouse, P. G. (2016). *Leadership: Theory and practice (5th Ed.)*. Thousand Oaks, CA: Sage.
- Nwankwo, J. (2014). *Management in education: Modern approaches in education management*. Ibadan: Giraffe Books.
- Oduwaiye, R.O., Sofoluwe, A.O. & Kayode, D.J. (2012). Total quality management and students' academic performance in Ilorin metropolis secondary schools, Nigeria. *Asian Journal of Management Sciences and Education*, 1 (1), 141-152.
- Ogunode, N.J., Jegede, D. & Abubakar, M. (2021). Problems Facing Academic Staff of Nigerian Universities and the Way Forward. *International Journal on Integrated Education*, 4 (1), 230 – 241.
- Ogunnaike, O.O., Borishade, T.T., Adeniyi, S. & Ezeugwa I.C. (2014). An empirical analysis of total quality management and perceived corporate image in higher education management. *European Scientific Journal*, 10 (22), 236 – 250.

- Oladimeji, R.M., Atunde, M.O., Abdulraheem, J.W., Medupin, J.A. Tijani, A.A., Oladejobi, J.O., Rilwan, A.A. & Jesuwaye, O.D.I (2021). Assessment of employment conditions in the library workplace: A comparative study of public and private universities in Kwara State, Nigeria. *AU-eJournal of Interdisciplinary Research (AU-eJIR)*, 6 (2), 58 – 69. <http://www.assumptionjournal.au.edu/index.php/eJIR>
- Rakesh, C. & Shabarisha, N. (2013). The impact of total quality management on banks and workers performance: a case study. *International Journal of Research in Commerce & Management*, 4 (9), 128 – 131.
- Samanhyia, S., Arhin-Larbi, L., Adusei, C. & Donbesuur, F. (2014). Assessing the educational quality gap in Ghana evidence from the Ashanti region. *International Journal of Economics, Commerce and Management*, 2 (11), 1-15.
- Todorut, A.V. (2013). The need of Total Quality Management in higher education. *Procedia - Social and Behavioral Sciences*, 83, 1105 – 1110.
- Qassim, U. (2017). The Implementation of TQM in Higher Education Institutions in Saudi Arabia: Marketing Prospective. *Global Journal of Management and Business Research: A Administration and Management*, 17 (1), 1 – 9.
- Ravindran, N. & Kamaravel, R.K. (2016). Total quality management in education: Prospects, issues and challenges. *Shanlax International Journal of Education*, 4 (2), 58 - 65
- Sanz, R. (2018). Education and migration: An assessment of the types and range of IOM's education and vocational training projects. Geneva, Switzerland: International Organization for Migration
- Van Bouwel, L., & Veugelers, R. (2013). The determinants of student mobility in Europe: The quality dimension. *European Journal of Higher Education*, 3(2), 172–190. <https://doi.org/10.1080/21568235.2013.772345> Yaro
- Zubair, S.S. (2013). Total Quality Management in Public Sector Higher Education Institutions. *Journal of Business & Economics*, 5 (1), 24-55