Full research paper

ACADEMIC BENCHMARKING AND THE PROVISION OF QUALITY SECONDARY EDUCATION IN TANZANIA

Haruni Machumu ✉
Apolonia Agaptus

Mzumbe University, Tanzania

✉ msekulaj@gmail.com

ABSTRACT

The academic benchmarking process is broadly employed by private secondary education providers and educational stakeholders in Tanzania to examine the benefits and drawbacks of service delivery. The study explored the use of academic benchmarking in providing quality education in Tanzanian secondary schools. Employing a cross-sectional research design, data were collected from 188 participants and subsequently analysed both descriptively and thematically. The study found that the academic benchmarking process plays a significant role in ensuring the provision of quality education through internal assessment, comparisons, and the adoption of best practices from benchmarked schools. Further, the findings reveal that six types of academic benchmarking are utilized in Tanzanian secondary schools. According to the study, proper academic benchmarking in secondary schools will improve educational results among secondary school graduates. Furthermore, academic benchmarking in secondary schools affects school rankings, which reflect a school's potential to do well at the end of national examinations. The study concludes that academic benchmarking enhances the provision of quality education by influencing future performance and commitments to work on secondary schools' goals, vision, and mission. Moreover, the study provides both theoretical and practical insight to the understanding of the necessity of academic benchmarking in secondary schools.

KEYWORDS

Academic benchmarking, benchmarking process, quality assurance, quality education, secondary schools

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Highlights

- *Providing high-quality education in secondary schools is positively impacted by academic benchmarking activity.*
- *The types of academic benchmarking employed in secondary schools impact the delivery of high-quality instruction.*
- *Academic benchmarking strengthens the provision of quality education in secondary schools.*
- *Academic benchmarking gives the management team of secondary schools room to improve the delivery of high-quality education.*

INTRODUCTION

Over the last few decades, benchmarking activity has been a source of critical information for educational stakeholders, policymakers, policy analysts, and management teams in terms of decision-making (Ambula, 2006). Research indicates that high-ranking educational institutions employ a range of methods, including curriculum review, quality assurance tools, instructional approaches, comparative analysis, evaluation, and self-assessment (Darling-Hammond and Wentworth, 2010). These methods pertain to the core functions and activities of schools, aiming to enhance the quality of both graduates and the teaching-learning experience for students and teachers alike (Achama and Nwogu, 2013; Sankey et al., 2019). In this study, 'benchmarking' is defined as an ongoing process where an organisation evaluates and contrasts its functions, systems, and practices against those of leading competitors. This process helps to identify areas for improvement within the organization, aiming for a competitive edge both locally and globally (Knipe, 2002; Stroud, 2020). Within this framework, benchmarking pertains to quantifiable and measurable standards for teaching and learning. Benchmarking in education refers to the establishment of measurable learning standards. It provides a valuable tool for evaluating performance against established benchmarks or standards

in comparison to peers (The University of Adelaide, 2020). Specifically, Academic Benchmarking (ABM) ensures that educational institutions deliver quality education in secondary education. Such benchmarks serve as assessments that evaluate students' performances against the set institutional standards and learning goals (Top Hat, n.d).

Ideally, the ABM process would evaluate performance and examine the broader educational context, such as strategies to enhance teaching methods and optimize student learning across various settings. However, recent studies suggest that a significant portion of ABM projects arise from client grievances (Kailong, 2019). It is also worth noting that the concept of ABM is rooted in the industry and business sectors. Here, regular evaluations, introspective assessments, and performance reviews are vital to ensure the delivery of top-tier services and products to clients (Al-Khalifa, 2015; Rafsanjani et al., 2022).

Furthermore, when used in secondary education, the ABM process may provide educational providers, school management teams, government agencies, and stakeholders with the answers they need to deliver high-quality education. As a result, it is critical to recognize that school administrators can use the ABM process to improve performance among specific students or schools within large at-risk schools and districts (Bano and Vasantha, 2019; Silva et al., 2020). Research suggests that the first use of Academic Benchmarking (ABM) in education can be traced back to the United Kingdom (UK), where it was employed to evaluate student performance, school systems, and standards of skills and knowledge (Portela et al., 2011; Sankey and Padró, 2016). Its popularity surged in the 1990s, especially in higher education (Al-Khalifa, 2015; Ambula, 2006). From that point onward, numerous ABM projects emerged globally, with a significant presence in regions like Europe, Asia, America, and Australia (Portela et al., 2011).

It is important to note that there have been limited ABM exercises and initiatives in African countries, especially when addressing the quality and standards of education across various levels, with particular emphasis on secondary education. This highlights a significant research gap concerning benchmarking processes in most of these countries. ABM primarily aims to address both public and governmental concerns regarding the quality and standards of educational services within countries (Nyaoga et al., 2013). However, to truly measure the effectiveness of these education systems, there is a need for in-country comparisons, assessments, and evaluations. Such measures can determine whether students acquire the necessary skills to thrive in today's competitive job market (Amunga et al., 2013; OECD, 2013). In the context of Tanzania, numerous education stakeholders have voiced concerns about the quality of secondary education. These apprehensions range from graduates lacking essential employability skills to an increase in antisocial behavior and consistently poor performance in final examinations (Nyaoga et al., 2013). While these challenges are recognized across other educational levels, they are particularly acute and confusing in most public secondary schools.

Moreover, different approaches have addressed the shortfalls in managing, providing, and developing secondary education sectors. For example, in recent years, secondary school administrations have applied the ABM approach to learn from the best actors in several areas, including academic undertakings, leadership, and planning and executing various activities (OECD, 2013). The ABM process offers invaluable insights into optimizing secondary school development and clarifying strategies to enhance the provision of quality education, decision-making, and academic performance (Achama and Nwogu, 2013; Ambula, 2006; Amunga et al., 2013; García y García, 2021). Despite its significance, there is limited understanding of the ABM process and its impact on the quality of secondary education in Tanzania. Given this context, there is an evident need to delve deeper into the ABM process and its role in promoting quality education within Tanzanian secondary schools. The subsequent section investigates into the intricacies of quality education in the Tanzanian setting.

Provision of Quality Education in the Context of the Study

The Ministry of Education, Science, and Technology (MoEST) plays a fundamental role in ensuring high-quality education in the country, endorsing the concept of school quality assurance (SQA) to maintain educational standards. Even though inspection-based supervision remains a dominant method, the MoEST has expanded SQA's scope to incorporate both internal and external mechanisms (United Republic of Tanzania (URT), 2014). Experience reveals that SQA primarily focuses on the effectiveness of teachers in preparing essential documents like the scheme of work, lesson plans, and lesson notes (URT, 2017b). The 2014 Education and Training Policy, particularly in policy statements 3.2.1, 3.2.2, and 3.2.3, emphasizes the commitment to quality education. This policy emphasizes that, in collaboration with stakeholders, the government will strengthen quality control processes, equip monitoring entities with essential resources, and revamp the inspection philosophy and system to enhance SQA efficiency in basic education. Specifically, the policy statement 3.2.3 stipulates that:

> *"The government will strengthen the system, methods, concepts, and philosophy of school inspections to improve basic education quality control. (URT, 2014, p.25)."*

The policy recognises the role of SQA organs in enhancing the quality of education at all levels. In 2017, the government launched the SQA in response to the policy statement outlined above. This organ ensures high-quality education through internal and external evaluations (URT, 2017a). It is worth noting that the SQA department supervises Tanzania's endeavours to maintain educational quality. However, the SQA guidelines document does not specify the suitable quality assurance methods to be introduced to both teachers and quality assurers to guarantee the delivery of top-quality education. The focus is on the thorough preparation of professional teaching documents such as lesson plans, schemes of work, and lesson notes as the primary strategy. The difference is observed in using the school self-evaluation form (SSEF) as a notification to SQA officials before their official visit (URT, 2017b). Hence, methods such as ABM, an internal mechanism for ensuring the delivery of quality education, are seldom introduced in

Tanzanian secondary schools. The current study contends that, by implementing the ABM process, schools perceived as underperforming academically might find feasible solutions if applied systematically. With this in mind, this study addressed the following research questions: (a) Which types of ABM are utilised in Tanzanian secondary schools? (b) What role does ABM play in improving the quality of education in Tanzanian secondary schools?

Theory Base

This study was informed by Edwin Locke's goal-setting theory of performance management, which was developed in the 1960s. Most benchmarking methodologies, including those centred around activity, process, and exercise, serve the same purpose as performance gap analysis. Moreover, the goal-setting theory stresses that challenging goals lead to higher performance than merely urging individuals to give their best (Latham and Locke, 2018). The theory advocates that educational managers and administrators should strive to guide and motivate high performance among staff. According to Heslin et al. (2008), the goal-setting theory directly links to the provision of formal performance appraisals, rewards, and recognition for high performance. Studies have progressively highlighted that school managers, administrators, superintendents, and supervisors widely accept that goal setting is a means to improve and sustain established institutional work-related performance (Lunenburg, 2011; DuBrin, 2012).

Goal-setting theory deals with taking remedial actions to address performance deficiencies. It is emphasised that most performance management initiatives are associated with performance comparison, gap closing, and changes in the management process (Latham and Locke, 2018), which are common tactics of the ABM process. The theory is relevant to the ABM process and the provision of quality education for the following reasons: first, the theory is a technique used to raise incentives for staff to complete their work quickly and effectively. Second, the theory facilitates anticipated performance by amplifying motivation and effort while enhancing the calibre of feedback (Lunenburg, 2011). Third, it focuses on the resulting process while keeping the institution's goals, mission, and vision like a school. Based on these insights, the current study sought to use goal-setting theory to explore the role of ABM in delivering quality education in Tanzanian secondary schools.

Types of ABM in Secondary Schools

The literature review shows several types of ABM established, deployed, and executed in business, industrial, and educational institutions (Levy and Ronco, 2012; Bhola, 2018; Marr, 2020). Most early studies, including the present work, concentrate on benchmarking and differentiate between the following types of benchmarking: product, process, strategic, and organisational (Nazarko et al., 2009; Kailong', 2019; Hughes et al., 2020). However, the literature reports that internal ABM, process ABM, competitive ABM (4), generic ABM, strategic ABM, and functional are the types of ABM that are primarily implemented and sustained within the educational sector (Harper, 2019; Spiegel, 2020; Ivancevich et al., 2000). These are described in the following paragraphs.

Firstly, Internal-ABM (IABM), as the name suggests, is a process used in secondary schools to identify the best practice, mechanism, or procedure for conducting a particular task. According to Marr (2020) and Bhola (2018), IABM compares performance, processes, and practices against other parts of professionals within a school. Ivancevich et al. (2000) contend that "if a particular department has adopted a method of scheduling classes which is far superior to methods used in other departments in a secondary school, the school might want the departments using few effective measures to benchmark the department with the superior scheduling system" (p. 50). IABM aims to discover the best practice available within an organisation to accomplish a task with the least effort or resources (Harper, 2019; the Economics Times, 2016).

Secondly, the competitive ABM (CABM) focuses on competitive activities that yield high performance among competitors. In CABMP, the school examines performance against peers or competitors to improve its inputs, processes, and practices (Marr, 2020). A study by Zairi and Leonard (1996) suggested that CABM can be employed to inform parents and clients about how poorly or effectively a school is performing in comparison to direct competitors. Past research findings indicate that CABMP contrasts an operation with its immediate competitors (Booth et al., 2011; Kailong, 2019; Nyaoga et al., 2013). In Tanzania, CABMP has demonstrated success in many private secondary schools, notably in the outcomes of the national examinations, with consistent placements within the top ten over several years.

Thirdly, there is Functional ABM (FABM), which entails examining specific or akin functions with superior performance across education or industry (Jetmarová, 2011). For example, high-performing schools are benchmarked by several other secondary schools in terms of the teaching and learning process. Furthermore, FABM compares an operation with similar ones across a wide spectrum of secondary schools. For instance, a school might choose to embark on a study tour in a commercial sector, such as banking, to assess how commercial subjects like accounting, customer care, and financial management are implemented in the real world. Studies show that most private secondary schools and other education sectors engage in FABM activities (Marr, 2020), benchmark academic programs, leadership styles, and operational and management procedures.

Fourthly, generic ABM (GABM). According to Bhola (2018), generic ABM (GABM) aims to overhaul ineffective organizational systems by implementing benchmarking strategies and best practices. A popular explanation of GABM in secondary school education is that secondary schools seek innovative practices to improve performance across multiple secondary schools (Al-Khalifa, 2015; Harper, 2019; Levy and Ronco, 2012). In general, it is interesting to note that secondary schools may opt to use one or all of the procedures based on the requirements and aims of the ABM process.

The fifth type of ABM employed in secondary education is strategic ABM (SABM). SABM is typically external and specifically analyses how other secondary schools have

achieved success (Spiegel, 2020). In implementing SABM, schools specifically examine the corporate strategies employed by other schools. This helps school leaders learn from successful practices within and outside their institutions, such as current academic achievements or success in sports and games. SABM compares actions taken at a strategic level to support the long-lasting advantage over the competition. In short, the literature about ABM strongly suggests that SABM looks at the drivers of high performance, usually across different schools (Booth, 2013; Nazarko et al., 2009; Sammut-Bonnici, 2015).

The sixth and final type of ABA is Process ABM (PABM). It compares the procedures and processes of different secondary schools, identifying and isolating areas for both short-term and long-term school improvement (Harper, 2019). PABM consists of a mechanism for identifying specific work procedures that could be improved by imitating external examples of excellence that can be set as the best standard in the education field (Marr, 2020; Spiegel, 2020). In that regard, PABM involves comparing one's utility with that of similar utilities, with the aim of self-improvement by adopting structures or methods proven successful elsewhere.

The Roles of ABM in Enhancing Quality Education in Secondary Schools

ABM plays a significant role in bolstering academic productivity. Studies indicate that benchmarking techniques, such as pairing with colleagues, are essential for enhancing diversity in academic performance (Hughes et al., 2020). Furthermore, it is posited that ABM holds potential for academic performance and serves as a remedy to bolster employee performance through mentorship. This, in turn, alleviates work-related stress and augments staff well-being (Kinman and Wray, 2020). Al-Khalifa (2015) maintains that ABM positively impacts students' academic performance through continuous, systematic learning processes, comparing and adapting best practices from higher-performing schools. Similarly, Achama and Nwogu (2013) highlight that ABM, as an improvement process, allows an institution to assess its performance against top-performing entities. This helps understand how these institutions attain their performance levels and utilize this information to better their own.

Moreover, Kailong' (2019) establishes a positive correlation between performance in secondary education examinations and the processes of planning, data collection, data analysis, and the implementation of academic benchmarking reports in schools. Kailong' (2019) advocates for adopting Deming's cycle model of benchmarking when undertaking ABM with other schools. This sentiment echoes Darling-Hammond and Wentworth (2010), who depict ABM as a reference point. Specifically, ABM creates a good learning environment for both students and teachers for higher and equitable achievement. These studies indicate that the question of quality education can be achieved by combining and comparing ABM best practices to improve own educational practice (Kosor et al., 2019). However, the studies did not establish the best practices that need to be adopted due to contextual differences. On the contrary, ABM is unknowingly practised in secondary schools, thereby the lower-performing secondary schools' ABM higher-performing government and private secondary schools in their national examination as an indicator for quality improvement (Silva et al., 2020). It was thus anticipated that the exchange of information, experiences, and practices between schools would serve as a beacon for refining teaching and learning processes, as well as leadership and managerial strategies, ultimately benefiting both students and teachers

MATERIALS AND METHODS

Educational Context and Research Design

The study took place in two municipalities: Ilemela (Mwanza Region) and Morogoro (Morogoro Region) in Tanzania, centring on the top ten secondary schools (five from each municipality). Secondary schools were chosen equitably, with five private and five government institutions. These schools were pseudonymously labelled 1-10, with numbers 1-5 representing private schools and 6-10 signifying government schools. Given that ABM was conceived to compare top performers (Al-Khalifa, 2015), these schools were engaged in adopting best practices. Particularly, schools such as 1 & 6, besides being top achievers in their respective municipalities, also serve as resource centres for other secondary schools seeking benchmarking opportunities. Moreover, the chosen secondary schools outperformed others based on results from the National Examinations Council of Tanzania (NECTA, 2020 and 2021). The location selection was influenced by convenience factors, such as proximity, familiarity with the area, and the participants' willingness. Similarly, a cross-sectional survey research design, employing various data collection methods, was utilised.

Research Participants and Samplings

The study involved 188 respondents and key informants. The respondents consisted of 130 teachers selected using the simple random technique through the lottery method. Others who were purposively selected included ten heads of schools (HoS), ten deputy HoS, ten academic teachers (ATs), two secondary school education officers (SEO), two secondary school academic officers (SEAO); 20 school management committee members (SMCM) and four Quality assurers (QAs). Using the lottery method, numbers were inscribed on pieces of paper and folded according to the required sample size. These were then mixed up, and every teacher willing to participate in each school selected one at random. Those who drew numbers between 1 and 13 were chosen as respondents. This procedure was adopted to ensure every teacher had an equal opportunity to be part of the study. Similarly, HoS, deputy HoS, ATs, SEO, SEAO, SMCM & QAs were purposively selected because they possess adequate information on the types, roles, and practices of ABM that need to be enforced for enhancing the provision of quality education in secondary schools. Furthermore, all six sampled schools were formally committed to ABM since the use of ABM in Tanzania secondary education is subject to the implementation of quality assurance processes and procedures (URT, 2014; 2017b). In this sense, the use of ABM among secondary schools is one of the focal points addressed in SQA.

Research Instruments

The study used self-developed instruments with insights from the literature (Magutu et al., 2011; Nyaoga et al., 2013; Ettorchi-Tardy et al., 2012). Questionnaires were developed for teachers, ATs, and deputy HoS via an exhaustive process that involved several steps (cf. choosing and evaluating appropriate items for the ABM types and the roles of ABM; pre-testing and revising of the instruments). The questionnaire consisted of two sections - A and B. Section A addressed respondents' demographic physiognomies such as the number of years at the schools, school establishment, school performance, types of schools, and gender; Section B included questions about the types of ABM, such as "what types of ABM are performed in this school," as well as questions about the roles of the ABM process, such as "ABM enables the schools to set appropriate standards," "ABM use external forces to school improve internal undertaking," and "influence and shapes schools' decisions and thus quality education." the item statements used positive and negative indicators to ensure reliable responses.

The questionnaire was administered before conducting the interviews. Interviews were conducted with instruments to guarantee consistency and increase the validity and reliability of the research instruments; pre-testing was conducted in two schools in two phases. Some interview questions include the following: "Please describe to me what ABM means to you and this school", "I would like to know what types of ABM are in this secondary school," and "as the school's academic officer, explain to me the process of ABM for quality education improvement."

Research instruments were tested and revised based on the first school in the first phase. Since respondents appeared to be more conversant in Swahili, the language used was translated from English to the Swahili language during the revision process. Besides, the phrase "academic benchmarking" seemed new to some of the respondents (cf. school management committee members), irrespective of English being used as a medium of instruction in Tanzania's secondary schools. Phase two involved testing revised research instruments in the second school as researchers looked for uniformity in response as provided compared to the first phase of testing in the first school. When the term "academic benchmarking" was translated in Swahili as "viwango vya kitaaluma", respondents connected it with "academic standards-setting". This notion warranted the continuation of the research study because they signified the same thing as "academic benchmarking" conducted in secondary schools.

The study employed the back-translation method to guarantee gathering valid and reliable data (Eremenco et al., 2005) and to achieve semantic consistency between the source and target languages (Duffy, 2006). This enhanced the dependability and applicability of the research instruments. Apart from obtaining written consent from participants, researchers sought oral consent before beginning these interviews and recorded the verbal agreement on a mobile phone. Furthermore, qualitative data were gathered through interviews, and a thematic analysis framework was used. The study utilised the theme framework to evaluate collected data. The analysis adhered to Creswell's (2014) approach wherein data were manually transcribed, themes were identified, and findings were presented and interpreted based on these established themes. Two research assistants also helped with data collection and classified the material independently. Researchers then analysed the recorded transcripts, coded sub-themes, and charted the data subcategories and categories to reach critical conclusions. Next, researchers read the transcript line-by-line, applying specific codes (namely, functional, process, strategic, competitive, generic, and internal) that characterised what was deemed significant in each segment. Finally, the data from the structured questionnaire were subjected to descriptive statistical analysis.

RESULTS

Types of ABM Used in Secondary Schools

This study traced six types of ABM, including process ABM, internal ABM, competitive ABM, functional ABM, strategic ABM, and generic ABM, for the respondents to identify based on benchmarking activities or exercises they frequently perform in their respective schools. The question asked *was, 'Which of the following types of ABM are used in this secondary school to influence the provision of quality education?'* Because the study intended to get types of ABM used in schools, respondents were required to select appropriate types of ABM by providing a tick "√" to either yes or no to their exact choice; multiple selections were allowed. The results are presented in Table 1.

S/N	Types of ABM	(Provide "√")	
		YES - F (%)	NO - F (%)
1	Process ABM (admission, dropout, assessment, and teaching-learning, evaluation, graduation rate)	140(93.3)	10(6.7)
2	Internal ABM (comparison between departments and comparison between secondary schools)	121(80.6)	29(13.4)
3	Competitive ABM (compare results against best performers/ contestants) in municipals	136(90.7)	14(9.3)
4	Functional ABM (to become the best in process and technology, compare the technology /process in one's school, coping strategies)	114(76)	36(24)
5	Strategic academic benchmarking (focus on services provided by the school)	77(51.3)	73(48.7)

Table 1: Teachers, Academic Teachers, and Deputy Head of Schools Responses on Types of ABM Used in Secondary Schools

Table 1 shows the six types of ABM utilised in Tanzanian secondary schools, with the first four being the most common: process ABM, competitive ABM, internal ABM, and functional ABM. However, strategic and generic ABM appears to be applied less in most secondary schools and, as a result, was least established by respondents. In alignment with this, interviews conducted with school heads, members of the school management committee, and secondary education officers revealed that all interviewees appeared to know about ABM and the types used in several secondary schools. Further, the data disclose that, in context, ABM is practised in secondary schools. However, some interviewees are not aware that what they conduct is ABM with several types. The findings revealed that several ABM activities conducted in different schools influence the provision of quality education and that academic performance reflects mainly internal and competitive types of benchmarking. Table 2 summarizes results related to types of ABM used in Tanzania secondary schools.

Generated themes	Coded sub-themes	Interview extract "quotes"
Functional ABM	Policies, national examinations, school achievements	*There are various strategies carried out to ensure that our school performs well in the national examination; therefore, the school management knows it well (SMCM_SS1_28 May 2020)*
Process ABM	Process, strategy, quality assurance, school achievements	*Staff rely on the school action plan to ensure that our school performs well in continuous assessment and national examinations (SMCM_SS10 5 June 2020)*
	an action plan,	*Undeniably, every school should prepare its action plan to raise academic performance (SEO_2_28 June 2020).*
	academic success, assessment, share skills, exam score	*We have emphasized working hard, sharing teaching and learning techniques, emphasizing internal assessment, and using data to predict each student's score in the final examination. (SEO_1_5 June 2020).*
	Teamwork, assessment, quality education	*Our school is working as a team to assess our way of ensuring the provision of quality education (SMCM_SS7_5 June 2020).*
	Joint exams, activity, procedure, arrangement	*Our schools do joint-examination with higher-performing schools within our municipal and other schools in the region (HoS_SS7_5 June 2020)*
Competitive ABM	Assessments, leadership, examination, curriculum content	*The academic master leads teachers to accomplish their syllabus and make revisions to make students fit for the national examination (HoS_SS2_28 May 2020)*
	Quality education, internal assessments, School Committee	*The school has an internal school committee that is responsible for assuring the provision of quality education compared to other schools (HoS-SS3_28 May 2020)*
	competitive ABM, exams, best practices, best practices	*We usually compare ourselves in national examinations, and then we take measures to learn from our competitors the best methods to improve ours (HoS_SS8_29 May 2020)*
Internal ABM	Management, school practices, assessments, academic performance	*The School Committee is responsible for making an internal assessment of school practices based on the education provided, academic performance, leadership, and school environments (SEAO_2_26 June 2020)*
	Student success, motivation, curriculum content	*In our school, every teacher is informed to cover the syllabus; therefore, we encourage school leadership, teachers, and parents to motivate students on school-related issues for their success (SMCM_SS5_5 June 2020).*
Generic ABM	Generic ABM, academic performance strategies, teamwork	*ABM in our school is conducted; however, in our usual understanding, we call it internal academic performance strategies as applied in other organizations (HoS-SS10_2 June 2020)*
Strategic ABM	Strategic ABM strategies, discipline, moral issues, academic performance strategies	*We share our strategies regarding academic performance, discipline, and moral issues with our neighboring private schools (HoS_SS6_7 June 2020).*
	collaboration, strategic, professional, leadership, strategic	*Our region (Morogoro) introduced Partnership in Excellence (PE), a program that calls for teachers to collaboratively work together, share teaching and learning information and leadership, and carry out professional prediction and comparisons (SEAO_1_18/05/2020)*

Table 2: Interviewees' Responses on Types of ABM Used in Secondary Schools

Generally, from different perspectives, the results disclose that six types of ABM are in practice in Tanzania secondary schools; however, four types are usually performed.

The Roles of ABM in Enhancing the Provision of Quality Education in Secondary Schools

The present study also sought to identify ABM's roles in enhancing quality education in secondary schools. A questionnaire with eight statements established to measure the role of ABM in secondary schools was used to collect data from respondents. Respondents were required to identify the level of agreement on the eight selected statements based on a five-point Likert scale, and the choices ranged from strongly agree to strongly disagree. Table 3 summarizes the results.

S/N	Statements (s)	Strongly agree F (%)	Agree F (%)	Neither agree nor disagree F (%)	Strongly disagree F (%)	Disagree F (%)
1	ABM increases school visibility and potential	85(56.7)	50(33.3)	5(3.3)	4(2.7)	6(4)
2	ABM improves schools' internal activities	52(34.6)	82(54.7)	12(8)	1(0.7)	3(2)
3	ABM promotes active learning	90(60)	44(29.3)	4(2.7)	6(4)	6(4)
4	ABM enables schools to set academic standards and evaluation criteria	80(53.3)	66(44)	2(1.3)	1(0.7)	1(0.7)
5	ABM enhances academic performance status	102(68)	27(18)	11(7.3)	3(2)	7(4.7)
6	ABM helps bridge the inefficiency gap in school management	5(3.3)	88(58.8)	53(35.3)	2(1.3)	2(1.3)
7	ABM influences and shapes schools' decision-making	4(2.7)	60(40)	56(37.3)	10(6.7)	20(13.3)
8	ABM stimulates instructional leadership	4(2.7)	19(12.7)	52(34.6)	15(10)	60(40)

Table 3: Roles of ABM Process in Influencing Quality Education in Secondary Schools

Generated themes	Coded sub-themes	Interview extract "quotes"
Enhances academic performance status	Academic status increased performance,	*ABM helps a school to maintain its academic performance status. The technique seems to ensure the rate of performance increases (HoS_SS6_27/05/2020)*
Enables school to set academic standards & evaluation criteria	Motivation, assessment strategies	*Through sharing techniques of teaching and assessment strategies with neighboring schools, our school commits to working hard to rescue its status (HoS_SS4_29/05/2020)*
	achievement, motivation, rewards	*Enhance students' competition to achieve high in their final examination as they are recognized and rewarded (HoS_SS2_28/05/2020)*
Promote active learning	Install competitive tendency, internal rewards, meet school goals,	*ABM installs competitive tendencies in our schools. We normally appraise our students to work by referring to the outgoing students' performance (HoS_ SS6_7/05/2020).*
Enhance visibility and potential	Partnership, joint strategies, visibility, academic excellence	*Our school has a partnership with other schools in both Morogoro and Dar es Salaam regions. We have joint strategies to raise academic excellence, notably interschool examinations and exchange in the marking process (SMCM_SS2_ 05/06/2020).*
	Academic success, hard work, school visibility	*ABM tactics force teachers and students to work accordingly for the betterment of themselves and the school as a whole (SEO_2_14/05/2020).*
	Partnership, academic excellence	*We encourage schools to visit other best performers to learn from their academic excellence and other administrative issues (QA1_SS2_15/05/2020).*
Stimulate instructional leadership and management	Achievement, leadership, management	*Many schools in this municipal area have benchmarked some tactics from two high-achiever schools due to their achievements (SEO_1_05/06/2020).*
	Achieve goals, managerial model	*ABM has helped us achieve our goals and is an excellent example in our municipal and beyond (SMCM_SS7_15/06/2020).*
	A culture of working hard, achieving school goals,	*ABM tactics help maintain the culture of achieving schools' goals, vision, and mission, hence fulfilling national educational objectives (QA2_2_13/06/2020).*
	Maintain status, hard work, leadership	*ABM forces us to rectify our techniques and emphasizes that teachers and students work hard to maintain our status (HoS_9_SS8_ 05/06/2020).*
	Achieve goals, visibility	*ABM is a tool for ensuring staff work to meet the school's set goals (SMCM_ SS10_28/05/2020).*

Table 4: Interviewees' Responses on Roles of ABM in Secondary Schools

The assumption was that the influence of the ABM process on improving the quality of education in secondary schools is generally evident. Yet, when respondents were prompted to pinpoint the roles of the ABM process in enhancing the quality of education in their specific secondary schools, contrasting views emerged on the established roles of the ABM process, as depicted in Table 3. Notably, a substantial number of respondents, namely 56 (37.3%) and 52 (34.6%), respectively, were uncertain whether the ABM process bolsters instructional leadership or significantly impacts school decision-making processes. Overall, multiple roles of the ABM process contributed to improved educational standards in secondary schools. Likewise, interviews yielded five prominent themes regarding the roles of the ABM process, underscoring its potential to elevate the quality of education in secondary settings. The findings are consolidated in Table 4."

DISCUSSION

Types of Academic Benchmarking Used in Secondary Schools

This study aimed to explore the ABM process's roles in providing quality education in secondary schools. The results show that six types of ABM (i.e., process ABM, competitive ABM, internal ABM, functional ABM, strategic ABM, and generic ABM) are used in secondary schools to influence the provision of quality education. Further examination indicates that, among six types, only processes ABM, competitive ABM, and internal ABM are commonly practiced in secondary schools. This suggests that teachers, academic teachers, and deputy HoS are more likely to use the most practiced ABM types to provide quality education than the functional ABM, strategic ABM, and generic ABM. These findings closely align with those of Al-Khalifa (2015) and Magutu et al. (2011), who determined that internal benchmarking formed connections between schools undertaking similar operations, functions, and activities, aiming to elevate best practices within those institutions.

Additionally, the findings indicated a prevalent use of competitive benchmarking in secondary schools. However, it was discerned that competitive ABM is especially widespread in private schools, where the commitment to high-quality performance is unquestionable. This means secondary schools conduct competitive ABM accomplishments that aim to compete over others in quality education in terms of academic performance, results, and other services rendered by the school. Such an approach to ABM is apt to drive schools to enhance the provision of quality education because they need to compare their performance with their competitors (Hughes et al., 2020). This motivates the interest and desire of non-performing schools to adopt the practices to become competitive. The process of learning from the best has resulted in benchmarking among schools. These six ABM types further highlight the notion that each school formulates its action plan, incorporating the ABM process to ensure quality education. It was noted in the interview section of this research that most of the types of ABM call for teachers and stakeholders to work together, share teaching and learning information collaboratively and leadership, and carry out professional predictions and comparisons. This means that most ABM types are described as strategies aiming to improve the provision of quality education, notably academic results in the national examination and assessment.

Roles of ABM in Enhancing the Provision of Quality Education

Different roles of ABM were administered in relation to the provision of quality education. However, only the roles that ranked 50% and above reflected in the study area are discussed in the current study. It was established that ABM plays an essential role in increasing school visibility and potentiality in different aspects of enhancing the provision of quality education in secondary schools. In support of that, 90% of the respondents complemented the evidence from the interview. About the processes, the tool is taken as a model that needs to be implemented as a program involving the parts concerned. The results suggest that ABM provides opportunities for teachers, administrators, and students to learn from other best practices to enhance the provision of quality education in their respective schools. This means that most secondary schools are likely to increase enrollment due to the quality of education provided due to high performance and noticeable by the community. The school also evaluates its performance against the standard and quality education criteria. This aligns with Achama and Nwogu's (2013) assertion that benchmarking serves as a reminder to rectify or abandon traditional practices that may prove detrimental to an institution.

Besides, the study depicted other potentials, such as improving teachers' professional career development. ABM gives prominence to the application of data to establish the gap that exists in performance within and outside the school. Teachers have a great opportunity to crave their careers professionally for such reasons. This assertion is supported by Darling-Hammond and Wentworth (2010), who state that the adopted practices must be oriented to teachers as school-based professional development. Contrarily, if the adaptation is not aptly directed, it might face teacher resistance, as Booth (2013) suggested.

The findings also show the respondents agreed that ABM promotes active learning. This means that students, teachers, school management committees, and educational leaders work in tandem to enhance the provision of quality education in their schools by advocating best ABM practices. The findings complement the goal-setting theory that premises on result-oriented against the school goal, mission, and vision (Locke and Latham, 2002). It should be noted that quality education primarily strives to improve the active learning process for both academic and administrative excellence. This research aligns more with Hacker and Kleiner (2000), who argue that benchmarking enables one to correct one's own teaching and learning deficiencies for good academic results. The efforts carried out in education end in improving learning outcomes. As a result, benchmarking ensures that a school maintains consistency in a higher ranking in national examination results. The current study found that secondary schools in the study areas take counteractive measures that need every school to assess and evaluate their performance gap. The findings

align closely with Amunga et al. (2013), who asserted that benchmarking assists educational institutions in identifying performance gaps and formulating and executing potential solutions. Likewise, the strategies emphasize sharing success; thus, low-performing schools are obliged to do joint exams with higher-performing schools and set other criteria for raising academic performance. In addition, the findings report that ABM improves working habits and peer coaching. For such reasons, the school confers to greater continuity and cumulative impact for maintaining its status quo through upholding the ABM process (Achim et al., 2009).

The most significant part of this study is that, despite many respondents being inexperienced with the study topic, the data show that 62.1% acknowledge the importance of ABM in resolving inefficiencies. It is a fact that the benchmarking process involves identifying deficiencies prevailing in the school for relevant intervention. This may result from motivation to enhance the provision of quality education in their respective secondary schools compared to others. The identified deficiencies bridge the knowledge-performing gap that creates inadequacies in providing quality education. Perhaps this is why Kinman and Wray (2020) declare that benchmarking is a remedy for an inefficient system. ABM application is a scientific investigation of complex education problems that must be addressed. Echoing this sentiment, this study emphasizes the need to familiarise secondary school teachers with this approach, enabling them to confidently tackle educational issues with suitable interventions.

Implications, Limitations, and Areas for Further Studies

The present study highlighted that adopting ABM positively impacts delivering quality education in the surveyed secondary schools. First, the study implies that in the execution of ABM types, secondary schools were argued to change their mode of performing ABM activities because some types are practiced frequently while others are not. Therefore, it should be noted that each ABM type serves a different purpose. As such, secondary schools in Tanzania should utilize each ABM type based on its primary roles. Second, although strategic and generic types were least used among examined secondary schools, schools are argued to note that if properly utilised, they can offer positive outcomes based on their roles in influencing best academic performance, such as in the least performing subjects like Science, Technology Engineering and Mathematics, henceforward, provision of quality secondary education.

Another implication is that ABM plays a great role in influencing the provision of quality education by fostering instructional leadership and informed decision-making among school leaders, superintendents, directors, and educational officers. This means that secondary schools should undertake various ABM initiatives to ensure structured school activities that lead to quality learning. Doing so allows the studied secondary schools in Tanzania and beyond to establish academic standards and evaluation criteria. Consequently, the study suggests that educational stakeholders in other countries, notably secondary school teachers, adopt the ABM process to better their practices. Furthermore, the current study recommends that secondary schools apply ABM knowledge by first assessing their imperfections and strengths. Then, as part of the ABM process, arrange field trips or study tours to the best-performing schools to reskill, upskill, retool, and learn how to address their most significant drawbacks. Correspondingly, ABM knowledge should help Tanzanian and global education leaders and policymakers designate specific school programmes and goals for developing and strengthening teachers to successfully attain ABM outcomes for the provision of quality secondary education.

However, this study has its limitations. First, the study was limited to 10 secondary schools in two municipalities found within two regions in Tanzania and only those located in an urban context. This could potentially hinder the broader applicability of the findings. Therefore, future research should encompass a more diverse range of secondary schools and regions. Second, the study used only 188 samples with several characteristics; similar studies can be conducted using a large sample, comparing privately owned, operated, and maintained with government-operated secondary schools and using both semi-urban and rural areas. Lastly, an experimental approach could probe the efficiency and effectiveness of ABM in elevating the quality of secondary school education. In a comparative study, such research could elucidate the relationship between experimental schools (where benchmarking is applied) and non-experimental schools (those without the benchmarking intervention).

CONCLUSION

The current study concludes that the several types of ABM were practised in studied secondary schools. While some respondents viewed ABM as a novel concept, it is evident that each type of ABM plays distinct roles. Secondary schools and secondary educational practitioners need to set aside programs for deploying ABM to successfully provide quality secondary school education. Prominently, the findings of the current research study can be applied to similar educational contexts in Tanzania and abroad to improve the quality of secondary education. School leaders, school management teams, and education quality assurers can apply the ABM process and knowledge obtained through deploying the ABM process to their schools to heighten their roles in providing quality education in their secondary schools. In addition, activities and measures taken, such as field visits, study tours, and planning, are used to raise the provision of quality education in secondary schools. This insight into ABM is significant for understanding how its knowledge might be applicable in settings with similar characteristics.

Correspondingly, the study concludes that internal assessment and comparisons of its practices signify the competitive nature with higher performers, leading to the provision of quality education and good results in secondary education examinations. Thus, it is worthwhile to orient academic benchmarking practices in secondary to ensure the provision of quality education. These findings provide a potential mechanism for applying academic benchmarking activity among teachers and school management teams in other contexts to improve and enhance the provision of quality education. Further, the study concludes that ABM has

a significant role in ensuring quality education through internal assessment, comparisons, and adopting best practices from benchmarked schools. ABM creates avenues for mutual learning through sharing, collaboration, modelling, and competition. It can also be concluded that if ABM practices are collaboratively done with partner schools, there are possibilities of improving teachers' traditional practices to those that suit them best for positive impacts on academic performance in secondary schools.

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