

The Relationship Between Leadership And Management Practices With Quality Learning In Kenyan Public Medical Training Colleges

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Abstract: Leadership literature reveals that leadership and management play critical roles in improving quality of learning. Organizations' ability to fulfil their mandate is determined by the management and leadership skills and practices of the leaders. For organizations to continually be informed and respond to the changing needs, they ought to keep on being involved in research. Since the establishment of Kenya Medical Training College in 1990, no study has been conducted to assess the relationship of leadership and management practices with quality learning. The aim of this study was to determine the association of leadership, Management Practices and Quality of learning in public Medical Training Colleges in Kenya. A descriptive mixed design survey was utilised to gather qualitative and quantitative data from respondents in six institutions purposively selected to include National, Provincial and District training institutions. Simple random sampling was used to select 464 respondents to semi structured questionnaires. Two focus group discussions were held with 15 lecturers from the college. Data was analysed both descriptively and inferentially using the Statistical Package for Social Sciences 20 (SPSS 20). Results showed that managers possessed adequate management skills to assist them perform their roles effectively, while practices that can support quality learning can be classified into four broad categories. Teacher leadership and management practices have significant correlation on quality learning ($p=0.01$) whereas the assessment that test recall of information has a correlation with preference for teachers who give factual information ($p=0.01$). Management of delivery of lessons by teachers has a significant relationship on the quality of learning while Management and leadership practices are significantly correlated to quality of learning in KMTC.

I. INTRODUCTION

The Kenya Medical Training College (KMTC) is a public institution, established under an Act of Parliament in 1990. The institutional mandate as provided for by the Act is to train and develop middle level health professionals. It has 28 constituent colleges, with a total student population of 14,000 registered in about 50 courses. About three thousand middle level health care professionals graduate from medical training colleges every year. The graduates constitute around 80% of human health care resources in Kenya.

Studies carried have shown that academic leadership has a big impact on learning outcomes, although other studies show no impact. In appropriate learning situations, leadership and management interact leading to adoption of practices that promote and support teaching and learning in a synergistic

collaboration. There is however no known study by the researcher that has been carried out to determine the interrelationships of leadership and management practices with quality learning. No such study has ever been carried out regarding Kenyan public medical training colleges. The outcomes should fill in knowledge gaps to enable policy makers apply empirical basis for selection and hiring of leaders in medical education institutions who would contribute to quality learning effectively and efficiently

The objectives of the study were to identify the leadership and management practices of managers and lecturers; determine leadership and management practices that can lead to quality learning and determine the relationship between the respondents perception on quality learning with the management and leadership practices adopted by those in leadership positions in Kenyan Medical Training Colleges.

CONCEPTUAL FRAMEWORK

The conceptual framework is based on an underlying assumption that quality learning is enhanced through adoption of good leadership and best management practices, based on works of ^(7, 8) that expound on the role that leadership plays in enhancing good students' outcomes. Leadership and management interact leading to adoption of practices that promote and support teaching and learning in a synergistic collaboration. This results into quality learning as witnessed by students' satisfaction and adopted quality standards.

II. RESEARCH METHODS

The study adopted a descriptive mixed design survey to gather data from Principals, Deputy Principals, Heads of Departments (HoDs), lecturers, and students from Nairobi campus, Embu, Nakuru, Nyeri, Thika and Machakos MTCs, purposely sampled to represent institutions within a national, provincial and district level teaching hospitals.

The study applied the formula

$$n = \frac{N}{1 + N(e)^2} \quad \text{to determine the sample size:}$$

Where n is the sample size, N represents the population size, and e is the level of precision.

The selected MTCs had 5523 students and 119 lecturers. At a level of precision of 0.05, the sample size for students was therefore:- $n = 5523 / 1 + 5523 \times (0.05)^2 = 372.9 = 373$ students; While the sample size for the lecturers was $n = 119 / 1 + 119 \times (0.05)^2 = 91.72 = 92$ lecturers. Further to this, a proportionate sample size of students and teaching staff were determined from each of the college/campus based on their population to ensure sample representativeness

Data was collected between the months of September 2012 and February 2013. Before data collection, the respondents' rights and obligations were explained. They were assured of confidentiality and their consent to participate willingly in the study was obtained.

DATA ANALYSIS

Both quantitative and qualitative approaches were used. Quantitative data from the questionnaires was coded and entered into the computer software for computation. The qualitative data generated from open ended questions and the focus group discussions was categorized in coherent categories. Data for objective one and two was analysed descriptively while data for objective three was further analysed using the Pearson's correlation to show the relationship between the variables.

III. RESULTS

RESPONSE RATE

A total of 490 questionnaires were distributed to the respondents. One hundred (100) were distributed to Principals, Heads of Departments and lecturers (academic staff), while 390

were distributed to students. Of the 100 questionnaires distributed to the academic staff, 75 (75%) were duly complete and therefore useful for data analysis while 372 of 390 (95.4%) questionnaires distributed to students were useful for data analysis. A total of 447 (88%) questionnaires were used for analysis of which 372 (83.2 %) were from students, 64 (14.3 %) lecturers, 7 (1.6 %) HODs while the remaining 4 (0.9 %) were from Principals.

CHARACTERISTICS OF RESPONDENTS

Results indicated that 6 (55 %) Principals/HODs, had occupied their positions for a period between 0 and 5 years, while 4 (36%) had held their positions for 6-9 years. Only 1 (10 %) Principal/HOD had held the position for a period of 10-15 years. Over half (55%, n=6) of the Principals/HODs held similar positions before while the other 45% (5) did not hold any prior management position before their promotion.

Out of the 64 lecturers who responded, 42.2% (27) were Senior lecturers, 32.8 % (21) lecturer III, 12.5%, (8) lecturer II, 7.5% (5) lecturer I, while 4.7 % (3) comprised of Principal lecturers. Majority (63%; n=21) of the lecturers had occupied their positions in KMTC for a period of 0-5 years, followed by those who had occupied their positions for 6-9 and 10-15 years at 17 % (11) each respectively while only 3% (2) had occupied their current positions for a period of 15-19 years.

Majority of the lecturers (40%; n= 26) had taught in KMTC for a period of up to five years, while 22% (14) had taught for 10-15 and 15-19 years respectively. Lecturers who had taught in KMTC for over 20 years accounted for only 5 % (n=3).

The highest number (24; 37.5%) of lecturers underwent a continued education (CE) course in 2013, followed by 15 (23.4%) before 2009. It is however noted that attendance of continued education courses has been persistently increasing from 2010 to 2013. Results indicate that funding for the CE was done by Lecturers (46.9%; n=30), professional bodies (28.1%; n=18) college (20.3%; n=13), while 4.7% (3) did not respond.

STUDENTS' CHARACTERISTICS

Over half of the students (202, 54.3%) were females while 170 (45.7%) were males. The students were in their first (4%; n=15), second (46.5%; n=173), third (47%; n=176) and fourth (2%; n=8) years of study.

MANAGEMENT SKILLS OF PRINCIPALS AND HODS

Table 1 show that majority of Principals/HODs (64%; n=7) had prior training in management, while 36% (4) had no formal management training. After promotion, 2 (50%) of the newly promoted Principals, who had no prior management training, reported to have coped through trial and error, one took up a management course while the other did not indicate how he/she coped in the new position. Results also indicated that 64 % (n=7) of the Principals/HODs believed their promotion was based on experience, 18% (n=2) due to the qualifications they possessed while 18% (2) attributed their

promotion the managerial and leadership skills that they possessed.

Management training	Frequency	Percentage
Yes	7	64
No	4	36
Total	11	100
Coped without management training		
Trial and Error	2	50
Took Management course	1	25
Non response	1	25
Total	4	100
Reason for Promotion		
Experience	7	64
Qualification	2	18
Management and leadership skills possessed	2	18
Total	11	100

Table 1: Management skills of Principals and HoDs (N=11)

Objective one: Leadership and Management Practices of Principals and HODs

Table 2 shows that Principals spend most of their time in allocation of resources towards promoting teaching and learning with a mean of 3.82 (SD 1.25), advising teachers on students learning at a mean of 3.73 (SD 0.65). Least of practices in the college include having a relaxed schedule to enable teachers to teach effectively with a mean of 2.73 (SD1.90), followed by inability to sponsor lectures/teachers for continued education courses with a mean of 2.36, (SD 1.12)

	Minimum	Maximum	Mean	Median	Std. D
The college has established quality teaching standards for teachers	1.00	5.00	3.27	4.00	1.19
As a college we have set goals for teachers	1.00	4.00	2.91	3.00	1.22
The college always allocates resources in tandem with teaching purposes	1.00	5.00	3.27	3.00	1.27
I always give teachers expert advice on students learning	2.00	4.00	3.73	4.00	0.65
I always assess the quality of teaching in the college/department	2.00	5.00	3.55	4.00	1.13
Most of the resources allocated are focussed toward promoting teaching and leaning	2.00	5.00	3.82	4.00	1.25
I spent most of my time on administrative teaching related engagements	1.00	5.00	3.27	4.00	1.49
I spend substantial time advising teachers and students on how to attain quality learning	1.00	4.00	3.00	4.00	1.18
The college has a relaxed schedule that allow teachers to concentrate on their teaching activities	1.00	4.00	2.73	3.00	1.90
The college regularly sends teachers for CPD course	1.00	3.00	2.36	2.00	1.12

N= 11

Table 2: Leadership and management practices of Principals and HODs

MANAGEMENT AND LEADERSHIP PRACTICES OF LECTURERS

Results on table 3 indicate that lecturers spend most of their time aligning goals and objectives with the vision and mission of the college with a mean of 4.05 (SD: 0.97), and using information obtained from feedback to improve on learning with a mean of 3.64 (SD: 1.24). Lecturers are not contented with the inability by the college to sponsor lecturers for continued education courses with a mean of 2.59 (SD: 1.09), management inability to appoint the right persons to the right jobs by merit with a mean of 2.55 (SD: 1.01) and lack of systematic teacher promotion with a mean of 2.36 (SD: 1.07).

Management/leadership practice	Min	Max	Mean	SD
My aims and objectives as a teacher are in alignment with the college's mission and vision	1.00	5.00	4.05	0.97
The quality assurance and enhancement measures put in place incorporates peer and students' reviews	2.00	5.00	3.75	0.91
Information obtained from assessments is used to improve on quality of teaching and learning in the college	1.00	5.00	3.64	1.24
Leadership roles are distributed between principal, teachers and students	2.00	5.00	3.59	0.94
Teaching resources allocation is in alignment with the college mission	2.00	5.00	3.52	0.93
Principal promotes a culture that improves quality	1.00	5.00	3.39	1.03
Financial planning supports educational priorities	1.00	5.00	3.34	1.00
Improvement is a culture practised in this college	2.00	4.00	3.33	0.89
Learning materials provided are adequate and in alignment with the learning objectives	2.00	5.00	3.30	1.06
Leaders in the college are interactive and flexible	1.00	5.00	3.30	1.03
I developed my teaching culture from experiences during the student days	1.00	5.00	3.27	0.98
Leaders and managers of the college always give us advice on how to attain quality learning	1.00	4.00	3.17	0.94
Principal has developed tools for monitoring the performance of teachers	1.00	5.00	3.16	1.10
The management gives teacher learning and development the highest priority	1.00	5.00	3.08	1.12
Appointment to the position of principal takes into account management and leadership skills of appointees	1.00	5.00	3.05	1.31
The college has continually developed me for my teaching role	1.00	5.00	2.94	1.18
College leaders focus more on learning functions than on administrative functions	1.00	4.00	2.91	1.06

The principal involves teachers in most decision making	1.00	5.00	2.81	1.31
The college sends and sponsors me to attend continuous education programmes regularly	1.00	5.00	2.59	1.09
Leadership appoints the right person for the right management job by merit	1.00	4.00	2.55	1.01
Teachers are promoted systematically in the college	1.00	4.00	2.36	1.07

N=64

Table 3: Management and Leadership Practices of Lecturers

OBJECTIVE TWO: LEADERSHIP AND MANAGEMENT PRACTICES THAT CAN LEAD TO QUALITY LEARNING

Table 4 shows the leadership and management practices that can lead to quality learning in Kenyan medical training colleges. Factor analysis using principal component analysis extraction method and varimax rotation elicited four key areas (explained by 47.8% of the variation) on the students attributes regarding issues of quality assurance and enhancement in the college. They are:

- ✓ Students satisfaction with the teaching
- ✓ Resources availability
- ✓ Teaching processes
- ✓ Institutional systems

These are further elaborated by the responses from students and the focus group discussions with lecturers.

Attribute	Component			
	1	2	3	4
What i normally get in tests is in alignment with how I can perform in a clinical setting				.457
I feel adequately trained as I leave college and can deal with any challenge I come across during practice				.749
All my teachers are highly qualified				.783
Teachers always give the rationale for every topic taught				.694
Teachers are highly knowledgeable on their areas of teaching				.662
I am exposed to a wide area of experience where am expected to practice at the end of my training				.762
We always get enough learning materials				.659
Students are involved in determining the content to be covered in a curriculum				.833
The methods teachers use in delivery of lessons encourage me to continue with education after graduation				.563
The methods used by the teachers in delivering lessons are learner centred				.420
Library and book facilities provided by the college are adequate				.491
Teachers always have time to concentrate on teaching				.425
I always find teachers being actively involved in carrying out research				.365
The college library is stocked with learning materials that are mostly current (under five years old)				.650

Teacher deliver lessons in an interactive way and not one way delivery as in lectures	.345
Teachers always consider students inputs while teaching	.454
Curriculum for the course am undertaking is definitely relevant	.578
I always get feedback from teachers that informs me on how to perform better in my studies	.685
Assessments mostly test memorization of facts	.657
Teachers always give evidence to support learning during training	.606
Teachers always give guidance on all pertinent issues regarding leaning	.695
I prefer teachers who give me factual information	.396
During training, teamwork is emphasized as key to meeting learning objectives	.781
I am to a great extent conversant with the roles of all the members of the medical team	.674
I know the important things to study from the examinations given by teachers	.737
Most of the resources I have seen procured in the last one year were geared towards promoting teaching and learning	.532

Key: 1 -Student satisfaction; 2- Resources; 3 - Teaching process; 4- Institutional processes
N=372

Table 4: Leadership and Management Practices for Quality Learning

FOCUS GROUP DISCUSSIONS

Results from two focus group discussions held with 15 lecturers and comments elicited from the lecturers and students further revealed and confirmed the above that the practices that can promote quality learning in MTCs may be classified into four broad categories. These categories are practices that enhance:-

- ✓ Unity of purpose
- ✓ Promote learning and teaching
- ✓ Support learners during the learning phase
- ✓ Institutional growth and development

UNITY OF PURPOSE

Some of the sentiments expressed were:-

“Teachers should cooperate and have teamwork in order to provide quality education to students”

“The principal should promote a culture that improves quality by involving teachers in most decision making”

“Lecturers should allow students to get involved in determining the content to be covered in a curriculum”.

It should be noted that the unity of purpose rooted for by teamwork should exist between the college management, lecturers and students.

PROMOTION OF TEACHING AND LEARNING

“Put more resources to the key objective of KMTC i.e. training of both students and teachers as opposed to workshops by management”.

“Improve on training on lecturers who in turn will promote quality to students”.

SUPPORT FOR LEARNERS DURING THE LEARNING INTERFACE

These practices should be focussed towards delivery of lessons by lecturers and the provision of adequate resources and technology. Some of the expressions from students and lectures included:-

“The library ought to be open for 24 hours and should provide references on self centred leaning”

“Teachers /lecturers should be involved in the clinical areas to demonstrate the ideal interventions”

INSTITUTIONAL PROCESSES

“Lecturers should develop educational materials for peer reviews to help in their role as part of accreditation process”.

“There should be more financial support for educational priorities”.

“Leadership should consider staff and students with disability during planning for education or workshops”

Objective three: Interrelationship in leadership and management practices with quality learning

Results revealed that, majority of the students prefer teachers who give factual information at a mean of 4.30 (SD=0.85). This is followed by feeling that teamwork is enhanced in KMTC at a mean of 4.24 (SD: 0.89), the perception that students have a wide experience has a mean of 4.11 (SD: 1.05). Observations that curriculum is relevant and that exam in KMTC test recall of information at 4.10 (SD: 0.86) and 3.99 (SD: 0.89) respectively. Perception that students are not involved in curriculum matters rank high as results reveal that students involvement in curriculum is valued lowly at 2.68 (SD: 1.34); learning resources are not current at 2.76 (SD: 1.24) and that allocated resources are not enough with a mean of 2.83 (SD: 1.11).

Correlation between Management and Leadership Practices of Teachers/Lecturers and Student Perceived Outcomes

The attributes were reclassified to derive composite scores based on three broad aspects namely quality learning, leadership and management practices. Table 5 results reveal that the lecturers seemed to be unsure with the management and leadership practices adopted within the colleges (mean=3.2; SD=0.7). The leadership skills were significantly correlated to management skills ($r=0.862$; $p=0.001$). Similarly, quality of learning was positively affected by the leadership practices ($r=0.69$; $p=0.001$) and management practices ($r=0.75$; $p=0.001$).

Category	n	Min	Max	mean	SD
Quality learning	8	2.13	4.25	3.3	0.6
Leadership practices	7	1.57	4.14	3.2	0.7
Management practices	9	2	4.33	3.2	0.7

***N Indicates the Number of Aspects Representing Each Category with 64 Respondents Each*

Table 5: Composite scores

IV. DISCUSSION

As leadership literature reveal, Leadership is one of the critical success factors for sustaining continuous improvement in any organization. This is so because leadership's main responsibility is to guide all members of an organization towards the achievement of the organizations' mission.

The study revealed that most of the lecturers are experienced in management. Those without management experience after promotion sought training while a few did trial and error. As note, to improve on outcomes the leadership needs to posses adequate skills to provide the necessary support. The principals and entire leadership need to make lecturers aware of the development opportunities that are available for them to improve their performance and also take the initiative to organise and support staff development programmes. This however was not the case as the college leadership only sponsored 21% of CPD courses while the majority of lecturers sponsored themselves.

During the focus group discussion, some principals and HODs did not even seem to understand the connection between leadership and quality learning but felt that what determined what a student learns is the lecturer and his/ her actions during the teaching. This is in tandem with what reveals is because the leadership is not sufficiently informed with what is effective and quality learning.

This could explain why the principals and HODs are involved more in administrative than instructional functions, thus forgetting to reward scholarship of teaching and learning as witnessed in Kenyan medical training colleges.

Successful learning is dependent on quality of teaching, guidance and the learning skills possessed by the learner. Quality teachers as those who:- tailor learning experiences to the abilities of the learner, involve learners actively, provide specific feedback, give students autonomy, foster collaboration self-directed learning.

Results show that in medical training colleges, active involvement of students in learning is practised as well as appropriate learning experiences and provision of feedback. However practices that can lead to self autonomy of students, foster collaboration seem not to be sufficiently practised. To teach students effectively, four components of the experiential learning cycle must be taken into account. These include experience, planning, feedback and conclusion, though they may not follow a particular pattern. In education, feedback is usually given verbally during a teaching and learning session and in many circumstances during assessments.

Assessments have been found to be a strong determinant of the learning strategy that a student will adopt during learning⁽¹³⁾ and have also been found to have a facilitatory effect in terms of motivating the students and increasing critical thinking and enabling a student to learn more. When students realise that assessments entail a major component of their learning, they vary their attitudes and strategies of learning to cope with the assessments' demands. Where assessments focus

on recall of factual information, the focus of the student will be to memorise and disregard the meaning, as deeper learning is relatively unrewarded. Results confirm that most of the focus during assessments is the focus on lower level testing (recall of information) and on knowledge. Pursuant to this, advice that to enhance the students' ability to apply what was learnt in the classroom situation in a practice scenario, then practical teaching should be embedded in the teaching and assessments.

To encourage deeper learning the assessment ought to focus on understanding towards higher levels of Blooms taxonomy. Assessments should be structured in such a way that students must never view them as a means to an end since the students tend to depend on the teacher for their learning and knowledge. This limits the students' knowledge acquisition. Assessments will however not have a big impact if feedback is not provided. The feedback will have even more profound effect if it is immediate. Use of assessments should be cautious as the teacher must always guard against using assessments that promote surface learning as those that involve recall promote surface learning. It is thus necessary to compliment traditional assessments with new ones that rejuvenate and improve teaching and learning.

One of the goals for education is the preparation of independent practitioners who will be able to use acceptable theories to meet their clients' needs. This implies that the professional should possess adequate theories and apply them appropriately and independently to a person who has a problem. This signifies that the successful professional should be self directed, independent and must possess problem solving and learning skills.

Results show that the lecturers seemed to be unsure with the management and leadership practices adopted within the colleges. In actual fact, people in leadership positions need to lead by example and educators will emulate their behaviour towards improved performance as learners become motivated when they receive their feedback on time that explains their performance and how to improve.

V. CONCLUSION

Most of the lecturers are experienced in management as demonstrated in the results. Those without management experience after promotion sought training while a few managed by did trial and error. What was grossly missing however, was the leadership aspect whereby it was clearly revealed that there was no deliberate effort to focus on the lecturers to prepare them for higher jobs as in training or sponsoring lecturers for continued professional development, but this was principally left to individual lecturers or their professional organizations

Practices that can lead to quality learning in MTCs fall into four aspects focusing on Unity of purpose, issues of promoting learning and teaching, supporting learners during the learning phase and institutional growth and development.

Management of delivery of lessons by teachers has a significant relationship on the quality of learning while Management and leadership practices are significantly correlated to quality of learning in KMTC.

REFERENCES

- [1] Kenya Medical Training College Act, 1990. Chapter 261, Laws of Kenya. Revised Edition 2012. Nairobi. National Council for Law Reporting. Retrieved from www.kenyalaw.org on 10th may 2012.
- [2] KMTC website: www.kmtc.ac.ke
- [3] Gibbs G, Departmental leadership for quality teaching – an International comparative study. Leadership Foundation for Higher Education.2009. University of Oxford.
- [4] Martin E, Trigwell K, Prosser M, Ramsden P. Variation in the experience of leadership of teaching in higher education. *Studies in Higher Education*; 2003;23, 3, 247-259.
- [5] Abdool M.A. and Bradley D. Twelve Tips to Improve Medical Teaching Rounds. *Medical Teacher*. 2013;35 (11): 895-899
- [6] Braillon A. Give the Sahara Desert to a Health Care Administrator and a Few Weeks Later He Will Have to Import Sand. *American Journal of Medical Quality*; 2008: 23;404
- [7] Robinson VMJ, Lloyd C, Rowe K. The Impact of Leadership on Students' Outcome: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*. 2008; 44(5): 635-674.
- [8] Leithwood K, Day C, Sammons P, Harris A, Hopkins, D. Seven Strong Claims about Successful School Leadership. Nottingham National College for School Leadership, 2006.
- [9] Yamane, T. *Statistics: An Introductory Analysis*, 2nd Ed. New York: Harper and Row, 1967.
- [10] Ali NA, Mahat F, Zairi M. Testing the Criticality of HR-TQM Factors in the Malaysian Higher Education Context. *Total Quality. Management & Business Excellence*. 2010; 21 (11): 1177-1188
- [11] Kolb AY, Kolb DA. *The Kolb Learning Style Inventory 4.0: A Comprehensive Guide to the Theory, Psychometrics, Research on Validity and Educational Applications*. Boston, MA: Hay Resources Direct. 2013.
- [12] Clements MD, Cord BA. Assessment guiding learning: Developing graduate qualities in an experiential learning programme. *Assessment & Evaluation in Higher Education*.2013; 38(1): 114-124.
- [13] Sandford BA, Hsu Chia-Chien. Alternative Assessment and Portfolios: Review, Reconsider, and Revitalize. *International Journal of Social Science Studies*. 2013; 1(1): 215-221
- [14] Robinson VMJ. Researching the Impact of Leadership Practices on Students Outcomes. Progress Made and Challenges to Overcome. A Paper prepared for Asia Leadership research and development Roundtable. January 11-12 2010. Hong Kong Institute.
- [15] Gentry WA, Griggs TL, Deal JJ, Mondore SP, Cox BD. A comparison of generational differences in endorsement of leadership practices with actual leadership skill level. *Consulting Psychology Journal: Practice and Research*. 2011; 63(1): 39-49.
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