

IJIRR

International Journal of Information Research and Review Vol. 05, Issue, 01, pp.4982-4992, January, 2018



RESEARCH ARTICLE

TOTAL QUALITY MANAGEMENT (TQM) THEORY PRACTICES IN GOVERNMENT SECONDARY SCHOOLS IN NGARA DISTRICT, TANZANIA: THE EXTENT THE PRINCIPLES OF TQM ARE BEING PRACTICED

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ARTICLE INFO

Article History:

Received 22nd October, 2017 Received in revised form 09th November, 2017 Accepted 27th December, 2017 Published online 30th January, 2018

Keywords:

TQM DSEO Ngara district.

ABSTRACT

This study aimed at exploring the practices of Total Quality Management (TQM) practices in Government secondary schools in Ngara District, Tanzania. Total Quality Management is centered on quality, based on the participation of all its members and aiming at long run success through customer satisfaction and benefits to all members of the organization and to society, through continuous improvement. Mixed methods design was used, specifically convergent parallel mixed methods, whereby descriptive survey and ethnographic designs were employed for quantitative and qualitative data respectively. The research sample consisted of 8 heads of schools, 64 teachers, 160 students, 16 parents and 1District Secondary Schools Education Officer (DSEO). Both probability and nonprobability sampling were used to get the sample. The study employed questionnaires, interview guides, and observation guides to collect data from the participants. Both descriptive and inferential statistic were used to analyze data. The findings revealed that a good number of the principles TQM were being practiced to less extent in Government secondary schools in Ngara district and most of the schools were not familiar with the common techniques which are used to implement TQM. Findings also showed that quality assurance and standards in schools in Government secondary schools in Ngara district was ineffective. In order to enhance quality education in Ngara district, the researcher recommended to the Government to emphasize TQM practices in its education system; increase capitation grants to the schools to enable the schools to buy adequate teaching and learning resources; to ensure that the suppliers (teachers, students in primary schools, book providers, etc.) meet quality standards among others. Recommendations were also made to school administration, parents and students

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INTRODUCTION

Total Quality Management (TQM), is a form of management that emphasizes continuous quality improvement processes in institutional operations. It represents a major shift in academic administrative circles from hierarchical to collegial management (Vanapria, 2013). Its principles practiced by the business world, according to Vanapria, have been adapted and applied to the education sector. For example, its philosophy has been applied to schools and colleges in the United Kingdom, United States of America, and in Asian countries such as Malaysia. Quality is at the heart of education. It influences what students learn, how well they learn and what benefits they draw from their education (EFA Global Monitoring Report, 2005). The quest to ensure that students achieve decent learning outcomes and acquire values and skills that help them play a positive role in their societies is an issue on the policy agenda of nearly every country.

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The efforts to achieve education is fundamentally about assuring that children, youth and adults gain the knowledge and skills they need to better their lives and to play a role in building more peaceful and equitable societies. This is why focusing on quality is an imperative for achieving the goals of education (EFA Global Monitoring Report, 2005). It come as no surprise, therefore, that the two United Nations international conference declarations focusing on education gave some importance to its qualitative dimension. The Jomtien Declaration in 1990 and, more particularly, the Dakar Framework for Action (DFA) in 2000 recognized the quality of education as a prime determinant of whether Education for All is achieved. The Declaration identified quality as a prerequisite for achieving the fundamental goal of equity. While the notion of quality was not fully developed, it was recognized that expanding access alone would be insufficient for education to contribute fully to the development of the individual and society. Emphasis was accordingly placed on assuring an increase in children's cognitive development by improving the

quality of their education (EFA Global Monitoring Report, 2005). A decade later, the Dakar Framework for Action declared that access to quality education was the right of every child. It affirmed that quality was atthe heart of education - a fundamental determinant of enrolment, retention and achievement. Its expanded definition of quality set out the desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation). The six goals adopted at the World Education Forum in Dakar, Senegal, in April 2000, implicitly or explicitly integrate a quality dimension. The second of the six goals commits nations to the provision of good quality education. Moreover, the sixth goal includes commitments to improve all aspects of education quality so that everyone can achieve better learning outcomes (EFA Global Monitoring Report, 2005).

The United Nations Children's Fund (UNICEF) (2000) strongly emphasizes what might be called desirable dimensions of quality, as identified in the Dakar Framework. Its paper Defining Qualityin Education recognizes five dimensions of quality: i) Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities; ii) Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities; iii) Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV and AIDS prevention and peace; iv) Processes through which trained teachers use child-centred teaching approaches in wellmanaged classrooms and schools and skilful assessment to facilitate learning and reduce disparities; and v) Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society (UNICEF, 2000).

In Tanzania there have been many policy directives and reforms which have been put in place in its endeavour to achieve quality education. The key directives, reforms and plans include: the Tanzania Development Vision 2025, the Education and Training Policy (ETP 1995), the Technical Education and Training Policy (1996), National Higher Education Policy (1997), Education Sector Development Programme (ESDP, 2008–2017), the National Strategy for Growth and Reduction of Poverty (NSGRP/MKUKUTA) I (2005/6 –2009/10) and II (2010/11 - 2014/15), Secondary Education Development Plan I (SEDP) (2004-2009) and SEDP II (2010-2015) among others (URT, 2010).

According to the Tanzania Development Vision 2025:

Education should be treated as a strategic agent for mind-set transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges which face the Nation. In this light, the education system should be restructured and transformed qualitatively with a focus on promoting creativity and problems solving (URT 2000, p. 19).

Therefore, the Education system in Tanzania, including secondary education, should play a critical role in the development of the nation through continuous production of knowledgeable, creative, and problem-solving graduates which can be achieved through the provision of quality education (URT, 2010). One of the major objectives of the ETP is to improve the quality of the education process. The NSGRP recognizes the vital importance of the expansion and qualitative improvement of the whole education system, and especially secondary education system. It envisages this as essential for any acceleration in economic growth and productivity. The aim is to have a high quality labour force, which in turn is dependent on the quality of education and skills imparted in the training system (URT, 2010).

In 2004 Tanzania came up with the Secondary Education Development Plan (SEDP) which was to be implemented in three phases of five years each, beginning with the first phase in 2004-2009. The Secondary Education Development Plan (2004-2009) aimed at achieving greater access to secondary education while simultaneously tackling equity, retention, quality and management issues (i.e., Management Reforms and Devolution of Authority and Education Management System Improvement)(URT, 2004). The second phase, that is, SEDP II (2010-2015) focuses more on the five main areas, one of them being about improvement of quality and relevance: the development and promotion of independent learning, critical thinking and analytical skills, through the restoration of textbook culture and wide reading of different materials; improving the learning and teaching environment; and time-ontask management for effective learning; improving science teaching at all levels; and, introducing Information Communication Technology (ICT) as a tool for teaching and learning (URT, 2010). Despite all these endeavours - from UN Declarations and programmes, AU assertions, national policies and programmes emphasizing vividly on the importance of quality education to an individual, national, continental and global levels, Tanzania is still experiencing difficulties in providing quality education in its secondary schools. The Education Sector Performance Report (ESPR) 2010/11 (URT, 2011) admits that there is a problem with the internal efficiency in the public secondary school educational system. It indicates a number of challenges which are centred on the effective provision of quality education in the context of enrolment professional expansion and sustainable development programmes to teachers at all levels. These challenges are evidenced in declining pass rates, low completion rates for primary, secondary and vocational sub-sectors; a shortage of qualified teaching staff at all levels, and inadequate teaching and learning materials in general, as well as shortage of assistive devices specifically for learners with special needs among others. All these affect the enhancement of quality education in public secondary schools in Tanzania.

The inadequacy of quality education in Tanzania is further confirmed by UNESCO in its document, UNESCO Country Programming Document 2011-2015, when it comments that:

A rapid increase in the school-going population and enrolment expansion has not been matched by a requisite supply of quality-related inputs such as qualified teachers, educational materials, sufficient classrooms, investments in school infrastructure and safety, water, sanitation and hygiene.

(UNESCO, n.d., p. 13). The recent examination results or mass failure and malpractices in national examinations, particularly in the Certificate of Secondary Education Examinations (CSEE) have raised much dissatisfaction among the customers of education. In the recent four consecutive years the national form four results have been as follows: in 2009 the average national pass mark was 52.83%; in 2010 average pass mark dropped to 50.4%; in 2011, 53.37% of examinees passed and of those who passed, only 10% were in the first to third divisions (URT, 2012). In 2012 it was the worst where only 43.1% passed (URT, 2013). The 2013 Tanzania Heads of Secondary Schools Association (TAHOSSA) consolidated report, in its general annual meeting at national level, exposes the existing challenges encountered in administration and management of secondary schools across the country which include: lack of enough funds to run In-service training (INSET) programmes; continual decline of performance in Form Two Secondary Education (FTSEE) and Certificate of Secondary Education Examinations (CSEE); shortage of science and mathematics teachers; shortage of non-teaching staff; inadequate infrastructure in schools; and shortage of teaching and learning materials in schools (e.g., books, science equipments, chemicals, models, etc.).

Other challenges mentioned in the report include truancy of students in day schools; lack of essential services such as water, electricity and transport; and political interference in school administration. In Ngara district, the research findings and various reports from heads of schools' meetings (TAHOSSA) show that Government secondary schools have been subjected to all these challenges. Kabendera (2009) did an empirical study to assess the effectiveness of the heads of schools in implementing the objectives of SEDP (2004-2009) in Government secondary schools in Ngara district, Tanzania. The study revealed that the objectives of SEDP had not been achieved effectively. They were being achieved at a very low pace. The findings indicated lack of conducive learning environments, poor performance in national examinations, lack of appreciation of good works and motivation of teachers, truancy and dropout were at high rates, lack of training and continuous improvement of teachers among others.

The ineffective achievement of the objectives of SEDP in Ngara district, according to the findings of his study, was mainly due to lack of administrative skills among the heads of schools, like not involving teachers, students, parents and community in school administration, especially in decision making and lack of communication skills. Also the government was not doing its part adequately as it had promised to do in the SEDP document. However, the study does not say specifically what management practices could be lacking in management of these secondary schools. Nzeyimana also did an empirical study in Ngara district, Tanzania, about management strategies for students' retention in community secondary schools in the district. The findings showed that student retention in the community secondary schools of Ngara district was characterized by high dropout rates, transfers and low completion rates. The study identified the main causes of dropout to be pregnancies, truancy, long distance from home to school, lack of teaching and learning resources, shortages of competent teachers, lack of water and provision or meals, lack of laboratories and libraries among others. The Nzeyimana also admitted that the problems were within the

administration. What could be the root cause of all these? That is, why pregnancies, truancy, and lack of T/L resources and facilities among others? That also did not come out clear in his study. This brought the need to explore whether the heads of schools were practicing an organizational wide commitment to infusing quality into every activity through continuous improvement mode of administration in their schools (i.e., TOM).

A report on the Secondary Education Status in Ngara District (2011/12), from the office of the DSEO, lists the following challenges facing secondary education in the district: shortage of teachers, inadequate teaching and learning resources, shortage of non-teaching staff, and lack of residential houses for teachers. Other challenges include lack of physical facilities such as laboratories and libraries, shortages of hostels, dropout and truancy, and pregnancies. These challenges hinder the achievement of quality education in the district. A three year consolidated report (2008-2010) of TAHOSSA in Ngara district mentioned dropout of students as one of the biggest problems facing secondary schools. This dropout was mainly due to truancies and pregnancies (TAHOSSA, 2010). Furthermore, while analyzing form IV and II national examination results of 2010, the heads of schools in Ngara district admitted that generally the performance was not good. Students who got division zero in form four national examinations were more than the students who scored division I-IV put together! They attributed the failure to: few number of teaching staff, unqualified students who are selected to join form I from primary schools, lack of dormitories and hostels, lack of cooperation among the few teachers present in schools, and lack of discipline among the students which led to several attempts of strikes at schools and denial to follow school regulations (TAHOSSA, 2011). In the Ngara TAHOSSA Conference held at Ngara secondary school, the heads of schools highlighted some of the challenges facing secondary education in the district. These include: indiscipline cases among the teachers such as absenteeism, incompetence in teaching, and lack of motivation to teachers (TAHOSSA, 2012). All these reports are from the heads of schools, they do not mentioned that the problems could be due to lack of quality management in their schools. This can be ascertained by making an exploratory study on whether TQM is being practiced in their respective secondary schools or not.

The previous empirical findings conducted in the district show that these problems were mainly due to lack of administrative or management skills among the heads of schools. All the challenges mentioned in the background affect significantly the enhancement of quality education in the district. However, these studies do not say definitely what type of management skills or theories are lacking or suggest which management theory could be put in place to rectify the situation. Moreover, the studies do not give the "why" or the root cause(s) of the challenges facing the achievement of quality education in the district. Even the reports from TAHOSSA do not mention categorically that the problems could be due to lack of quality management in their schools since they are from the heads of schools. Could this be ascertained by making an exploratory study on whether TQM is being practiced in their respective secondary schools? Hence, the need for a study to find out whether the principles of TQM such as customer focus, continuous improvement, management commitment, good leadership, teamwork and empowerment among others, were being practiced effectively in public secondary schools' administration in Ngara district. But why opt for TQM? Commenting on the education system of Tanzania, Prof. Deniss Tachiki of Tamagawa University in Japan, advised that Tanzania must undergo transformation by structuring its management by reforming the prevailing management system. He said that the view from Japan system of TOM could be applied in Tanzania, a system which can lead to economic and social breakthroughs (Tanzania Development Information Centre, 2012). According to him classroom, teacher-student teams are the equivalent of industry's front-line workers. The product of their successful work together is the development of the student's capabilities, interests, and character. Teamwork and collaboration result in high-quality benefits for the greatest number of people. He believes that TQM directly and covertly alters the values, culture, and mind-sets within an organization (Tanzania Development Information Centre, 2012).

Furthermore, the literature review shows that where TQM has been practiced in education, it has proved to be successful. For example, a study by Mehra and Rhee (2004), about enhancing educational learning through some TQM principles (USA), revealed that teamwork and empowerment concepts can be adopted in the classroom as a basis for enhancing the learning process. Prajogo and Brown (2004) carried a study to examine the relationship between TQM practices and quality performance in Australian organizations. The findings showed the strong links between TQM practices and quality performance. These are some of the few empirical studies which have been conducted. However, these studies do not bring out the point as to whether lack of TQM practices can be one of the root causes of lack of quality performance in government secondary schools that this study intended to investigate. Furthermore, studies lack African context. Mehra and Rhee (2004) and Prajogo and Brown (2004) did their studies in USA and Australia respectively and their findings showed that TQM implementation in schools brought success. Tachik's opinion, on how TQM has been successful in education settings, is out of experience in his home country Japan. Can its application also be a success in government secondary schools in Ngara district and Tanzania despite the fact that Tanzania differs in context from these other countries? Can drawing together, under a TQM system, all the mentioned programmes and initiatives of the Government of Tanzania, bring greater success in assuring quality education is achieved in Ngara district? Thus, in the absence of empirical literature on TQM practices in enhancing quality education in Ngara district this study was, therefore, necessary.

MATERIALS AND METHODS

The study was conducted using mixed methods design, particularly convergent parallel mixed methods. Convergent parallel mixed methods design is a form of mixed methods design in which a researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis. The researcher collects both forms of data at roughly the same time and then integrates the information in the interpretation of the overall result (Creswell, 2014). The researcher opted to mixed methods approaches because they can show the result (quantitative) and explain why it was

obtained (qualitative) (McMillan & Schumacher, 2010). Furthermore, they help the researcher to capitalize on the best of both quantitative and qualitative approaches and overcome many of their shortcomings; and they build a broader picture by adding depth and insights to numbers through inclusion of dialogue and narrative. Moreover, they allow for triangulation (O'Leary, 2011). By incorporating quantitative approaches the researcher used descriptive survey design whereas in using qualitative approaches, ethnography design was employed. Using descriptive survey research design, the researcher selected a sample of teachers and students and administered a questionnaire order to answer the research questions of the study. (McMillan & Schumacher, 2010). Ethnography design was used in this study to observe and find out about the existing teaching and learning culture in government secondary schools, to find out whether the existing culture in schools was in conformity with that of TQM practices. The population target in which the researcher generated the results consisted of all the heads of schools, teachers, students in the Government secondary schools in Ngara District and the District Education Officer (DEO). Since this study was conducted using mixed methods design, both probability and non-probability sampling were used in sampling procedures. Probability sampling techniques, namely stratified, simple and systematic random sampling were used to sample schools and students whereas non-probability techniques, specifically purposive sampling was used to select heads of schools, parents and DEO. The sample in this study, therefore, comprised of eight (8) secondary schools with their heads of schools, 64 teachers, 160 students, 16 parents, one DSEO of Ngara district.

These made a total of 250 respondents. They were selected as follows:

The statistics obtained from the DSEO office of Ngara District (2014) showed that there were 23 Government secondary schools in four divisions in the district, allmixed and day schools. Stratified sampling was used to select eight schools to participate in the study. The researcher selected 35% of all the schools (i.e., eight schools) in the districtwhich was in conformity with Mugenda & Mugenda (2012) who asserts that for descriptive researches, 10% of the accessible population is enough. The decision on the sample size from each division was based on proportional allocation to ensure that the ratio of schools in the district was reflected in the sample.

Stratified sampling was also used to sample students - boys and girls from each of the eight schools. The form IV students from each school under study were grouped into groups of male and female. This was done in order to balance the gender. As to the sample sixe, Yamane's formula to calculate sample sizes was used to calculate the sample sizes of the students in this study. A 95% confidence level and 5% precision level are assumed for Equation.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size, and e is the level of precision (Glenn, 2009)

About 160 out of 294 students from all the eight schools were sampled to participate in the study, 20 students were selected from each school. Since the number of form IV students from each school was relatively small, the researcher used simple random sampling to select 20 students (10 boys and 10 girls) from each school. The selection of the heads of schools was automatic. All the heads of the eight schools which were selected were involved in the study. The heads of schools were important in this study because they possess the required and key information the researcher was looking for. To ensure good representation among the departments, the selection of teachers was purposive sampling whereby heads of departments, the academic and discipline masters were selected. Government secondary schools in Tanzania have mainly six departments, namely departments of Languages (English, Kiswahili and other languages); Natural sciences (Biology, Chemistry and Physics); Humanities (Geography, History, Civics and Religion); Mathematics; Guidance and counseling; and Games and sports. Thus, six (6) heads of departments and one academic and one discipline master were selected, to make a total of eight teachers from each school. Heads of departments were important in this study a since they too possess the required and key information the researcher was looking for. These formed a sample of 64 teachers. The selection of the parents was purposive. The researcher asked the heads of schools to choose for him two parents (one woman and one man) who they thought were well informed about educational matters and who participate actively in school activities. This was to ensure that the researcher got key information from those who were knowledgeable and who knew well what was going on in their respective schools. They formed a sample size of sixteen (16) parents. The selection of the DEO was purposive. The DEO was important in this study since what they do and assess has a lot to do with the school administration and management, which in turn impact on quality standards.

Data Collection

In this study, questionnaires, interview and observation guides were used as instruments for data collection. Questionnaires were used to collect data from the teachers and students. Both closed-ended and open-ended were employed. Structured or closed-ended questions were used best for obtaining demographic information and other data that could be categorized easily. In this study, in-depth interviews, which tend to explore issues to great depth, were used. The researcher used interview guides and then used probing to clarify issues and obtain further information that enriched the data. Interview guides were used to collect information from the heads of schools, parents and DSEO. The researcher used participant observation mainly to observe the teaching and learning processes in classroom. In using observation technique the researcher used a structured observation checklist to observe: school mission, vision and motto (whether they are on the notice boards); school administration and management (on leadership style, customer care, supervision of teaching and learning activities, and school resources among others); school and classroom environment (on cleanliness of school compound, adequacy of students in classrooms, etc); and physical facilities (availability and adequacy); teaching/learning resources (availability and adequacy). He further observed teaching and learning processes in classroom;

availability and efficiency of libraries, laboratories; sanitation (availability and adequacy); extra-curricular activities/games and sports (availability and adequacy); and discipline (teachers' and students' discipline) among others.

RESULTS AND DISCUSSION

Demographic Information of the Respondents

Form four students participated in the study because they had stayed longest in their schools, hence had a lengthy experience with the services offered in their respective schools when compared to the rest of the students. About 56% of the student participants were boys while the remaining 44%were girls. It is a good indication that enrolment of girls in these schools is good. It is also an indicator of quality education since one of the aspects of quality education according to UNICEF (2000) is gender-sensitive environment. The findings show that about 72% of the student participants were between 16-18 of age. Another 20% constituted the age between 19-21, while students who were below 16 years were the minority, 6%. The findings imply that the majority of students started primary school at the age of 6 or 7, the recommended age in Tanzania. According to Fact (2013), children who enter school at six or seven, after several years of high quality nursery education, consistently achieve better education results as well as higher levels of well-being. The findings revealed that generally the principle of supplier quality management, in as far as age is concerned, was being observed in Government secondary schools in Ngara district.

The findings also indicated that the majority of students about 61% were in Day secondary schools without hostel and 90% of these commuted on foot while 9% used bicycles as a mode of transport. A school's location and distance from home can pose a barrier to education. Walking long distance may expose students to many risks and danger along the way. For students who do not have schools near their homes, the cost, risk and effort of getting to school can influence decisions about regular attendance, as well as participation in extra-class activities. It could be one of the contributory factors of poor academic performance and truancy experienced in schools in the district. Teachers were included in the study because they are the ones who conduct teaching and learning processes. They are coworkers with the school administrator and help to execute school plans, policies, regulations and instructional programmes. They were, therefore, in a good position to state whether TQM principles are being effectively practiced. Table 7 shows the teachers' responses. The findings further showed that the majority of the teacher respondents, 69% were males while female respondent teachers were 31%. From observation, in some of the schools studied, especially in rural areas, female teachers were almost non-existent despite the fact that all schools are co-educational. That meant that girls in these schools were lacking female role models who could speak out on their sexual harassment in schools. The results could also imply that some of the girls' personal issues and problems would not be well attended. The presence of women in schools can impact positively on girls' retention in school and on their achievement; female role model can support and encourage girls to successfully complete their studies and may even continue studying to become teachers, themselves. The findings imply that girls may have been impacted negatively. This could be one of the reasons as to why girls in government secondary schools in the district were not performing well in national examinations. The findings, furthermore revealed that 59.6% of teachers were Bachelor of Education (BED) degree holders, 34.6% were Diploma holders in education and only one teacher had Master of Education (MED) degree. About 4% were untrained teachers. Having untrained teachers in these schools was likely to affect the culture of quality teaching and learning. With regard to teaching experience, the findings indicated that the majority of teachers, 54%, had teaching experience of between 0-2 years, 30% had an experience of 6 years and above whereas the remaining 16% had teaching experience of 3-5 years. Generally, a good number of teachers, 46% had relatively long experience in teaching. However, most of the teachers in the schools studied, 54%, were inexperienced ones. Experienced teachers contribute a lot in students' performance, discipline and teaching effectiveness in general. The researcher assumed that teachers with long experience in teaching had adequate teaching skills and could contribute a lot to students' performance and discipline through effective teaching.

The Extent the Principles of Total Quality Management (TQM) are being practiced in Government Secondary Schools in Ngara District

To get an understanding on the extent to which the principles of TQM are being practiced in government secondary schools in the district the researcher asked both teachers and students to rate 13 and 10 items respectively. These items to some extent were used as indicators of TQM practices in schools. Rating was categorized in four options, namely nonexistent (1), uncertain (2), lesser existent (3), and greater extent (4). The findings are summarized in Table 1. The findings from Table 1 indicate that the majority of teachers, 71% and students, 62% were content to greater extent with the heads of schools in establishing unity among all the customers of education, particularly among the teachers, students and parents. This showed that most of the heads of schools instituted the 7th principle of Deming's 14 points which states that management should institute leadership in the sense that the primary task of leadership is to narrow the amount of variation within the

Table 1. Distribution of Teachers' and Students' Responses on the Extent the Principles of TQM are Evident in Government Secondary Schools

Item		Non-existent		Uncertain		Lesser extent		Greater extent	
		F	%	F	%	F	%	F	%
Unity among all the customers of education	T	4	7.7	1	1.9	9	17.3	37	71.2
	S	2	1.3	9	5.8	47	30.5	96	62.3
Management encourages team-work effort	T	1	1.9	4	7.7	11	21.2	35	67.3
	S	8	5.2	10	6.5	39	25.3	97	63
Work problems are solved through team meetings	T	3	5.8	8	15.4	13	25	28	53.8
	S	29	18.8	11	7.1	76	49.4	37	24
School always strives for continuous improvement	T	9	17.3	10	19.2	13	25	20	38.5
	S	24	15.6	10	6.5	64	41.6	54	35.1
There is quality leadership from the head of school	T	5	9.6	5	9.6	15	28.8	27	51.9
	S	4	2.6	9	5.8	41	26.6	98	63.6
Students and teachers actively participate in decision making processes	T	6	11.5	7	13.5	16	30.8	23	44.2
	S	23	14.9	9	5.8	79	51.3	43	27.9
Involvement of parents in school matters	T	2	3.8	6	11.5	9	17.3	35	67.3
	S	9	5.8	5	3.3	40	26	100	65
School gives praise and recognition for outstanding performance	T	4	7.7	4	7.7	22	42.3	22	42.3
	S	24	15.6	23	14.9	72	46.8	35	22.7

N(T)=52; N(S)=154; where N= Number of respondents, T= Teachers and S= Students

Moreover, the researcher wanted to find out whether the teachers had management qualification, that is, whether they had undergone a course in management in their training. About 63.5% of teachers confirmed to have the qualification while 28.9% denied. Management is one of the principles of TQM. Teachers who lacked this qualification, 36.6% were denying their schools this important element. The heads of schools were targeted in this study since they are the mediators and administrators who represent the board of governors in the running of the school. Theyare the chief supervisors and implementers of all the teaching and learning activities, all educational policies and programmes in their schools. Most of the heads of schools, 71% were male while only 29% were female. This implies that the gender balance in leadership in government secondary schools in the district had not yet been addressed. About 57% of heads interviewed were BED degree holders. The rest, 43%, were diploma holders. It is doubtful whether these diploma holders had acquired some important management and administrative skills, such as customer focus; communication; teamwork; and techniques to implement quality education; among others.

system, bringing everyone toward the goal of learning for all. The minority of teachers and students denied completely that heads of schools were establishing unity among teachers, students and parents. Teamwork is one of the key principles of TOM.It entails involving directly and actively educators, other staff and students in planning and implementation of the desired changes (Sahney, Banwet & Karunes, 2004). The researcher wanted to find out whether teamwork was being practiced in Government secondary schools in the district. The findings from Table 1 reveal that the majority of teachers and students, 67% and 63% respectively, supported the statement that school management encouraged and recognized teamwork. To a lesser extent 21% and 25% of teachers and students respectively did not supported the statement. The same question was set to the heads of schools, DEO and parents in interviews. All the heads of schools said cooperation and working as a team among the staff was quite good. Parents' views were different from those of heads. They had the view that, school management was trying but not that much. On whether teamwork was practiced in all schools in the district, the DSEO had this to say:

It exists but in some few schools. That is why when we go to some schools we do not even find signing books because the head is not around. We have a school like 'M', where work is very good. That is why we have suggested the headmaster of this school to be promoted to come to work in this office and good enough the Minister has appointed officially due to that. The office runs as usual with or without him. We do not blame them; they were not oriented on that. After some training at the Ministry, Regional levels they will understand and practice it (Interview: 29/4/2014). The researcher sought to find out from the participants whether the schools strive always for continuous improvement through effective training of teachers. Continuous improvement involves ongoing incremental improvements in all areas of the organization, that is, training and development of the employees for developing their skills and for learning how to use different tools and techniques so that they can become effective employees for the school (Teklemariam, 2009). Teachers, heads of schools and DEO were asked on whether school management instituted on the job training to teachers in order to provide continuous professional development. Their responses varied. About 38.5% of the teachers said school managements were to a greater extent always striving for continuous improvement through training of teachers, 25% said it was to a less extent whereas 17% were not noticing any efforts of continuous improvement in their schools. The responses show that the majority of teachers, 61% indicated dissatisfactions in teacher training while at work. It means that the sixth principle of Deming's 14points which states that management should institute training on job in order to provide continuous professional development activities for all administrators, teachers, and support staff was not being practiced accordingly. Training is key to the successful implementation of quality within the academic environment. It implies, therefore, that successful implementation of quality within the academic environment was missing in these schools because of denying many teachers chances for further professional development.

On being interviewed on whether they provided teachers' training, most of heads of schools differed from those of teachers. Almost all of them said teachers were getting inservice training through Teachers Development Meetings (TDMs) and Science In-Service Education and Training (INSET). As for further professional development in universities and colleges, heads of schools said it was beyond their capacity. What they could do was to suggest the names of teachers to the DSEO who in turn presented them to the District Council to decide who and how many were to be sent for further studies. When interviewed on the same issue, the DSEO admitted that because of few teachers in schools, only few teachers were being sent for further studies, but for short courses. It seemed training was mainly for heads of schools and science teachers. Only one teacher from languages (Kiswahili) received seminars and training. How about other teachers in other subjects? Leadership is possibly the most important element in TQM. An effective and efficient leadership is a prerequisite for the successful functioning of any organization. Leadership in TQM requires the school head to provide an inspiring vision, make strategic directions that are understood by all and to instill values that guide subordinates. good leader adopts a leadership style

as transformational styles which engage followers in the decision making processes. He/she is objective, fair and reasonable, acts with conviction, provides clear direction, and communicates effectively among others (Sahney, Banwet & Karunes, 2004). The study wanted to find out whether there is quality leadership in government secondary schools in the district. The question was asked to teachers, students, DEO and parents. As Table 1 indicates, the majority of teachers and students, 52% and 64% to greater extent agreed that heads of schools were good in leadership. About 29% and27% of teachers and students respectively said that heads exercised good leadership to lesser extent. Few teachers and students, 10% and 3%, said that good leadership was nonexistent in their respective schools.

Responding to whether there was quality leadership in Government secondary schools in the district, the DEO had this to say:

I should say it is moderate. Sometimes we fail to blame heads of schools because they are not being prepared for that. During our time, once you were appointed to be the head of school, we used to be taken to Bagamoyo and stay for 45 days, being taught leadership styles and morals, a practice which is not happening today (Interview: 29/4/2014). On the same issue, many parents said that the heads of schools were leading well their schools. However, some of the parents were not contented with the leadership in their respective schools. Some of their dissatisfactions were that heads of schools were not strong enough to stand firm in implementing some of the school rules. For instance, one parent complained that:

We have a rule that students should speak English all the time while at school, but you find them speaking Kiswahili and vernaculars! Worse still you find even teachers talking vernacular at school! Whom will they imitate and learn from? (Interview: 9/5/2014).

The findings from both DEO and parents contrasted to some extent with those of the majority of teachers and students. The responses of DEO, some parents and a good number of teachers and students show that there was some dissatisfaction about quality leadership in Government secondary schools in the district. With these findings it means that some schools could have been experiencing lack of a structural institutional pattern and inefficiency in performing all managerial functions. Quality achievement requires the full support of everyone within the organization (Hughey, 2000). When customers of education are well involved in school matters, are likely to have valuable ideas to contribute. The more the school management involves them in contributing to school matters the more ownership they will have of the final product and the more loyalty for the school (Padhi, 2006). The study wanted to find out whether school administration was involving their customers in a variety of ways such as by providing opportunities for participating in decision making and attending meetings. Through these ways school management can be provided with information, can build personal relationships and provide deep, quality and detailed data about the school. It is on this basis that the researcher sought to establish the extent the school management involves teachers and students in various quality management activities. As shown in Table 1, 42% of teachers actively participated in

decision-making whereas 31% of them were participating to lesser extent. About 12% never participated. On the side of students, 28% said that students' participation in decision making was active while the majority, 51% said that their participation was to lesser extent and 3% said that it was nonexistent. The findings from both teachers and students indicated that their involvement in school matters, such as participation in decision-making was generally to less extent.

The findings deviate from Deming's 14th point of quality management which urges the management to put everybody in the organization to work to accomplish the transformation. (Hughey, 2000). The findings also deviate from Deming's 12th point which urges management to institute pride of ownership to the organization's stakeholders. If the teachers and students are involved effectively in school matters, like decision-making processes, they will develop a strong sense of ownership that can have a significant impact on their attitudes and performance. Total participation/involvement organization customers is among the key principles of TQM. It makes the stakeholders to consider themselves as a vital element of the effort to achieve high quality. It shows that their suggestions and contributions are highly valued. When heads of schools were asked how they were involving students and teachers in decision making, most of them mentioned: class meetings, prefects committees, and School Baraza. For teachers, they involved them through meetings such as staff meetings, board meetings where they have their representative, through various committees such as school management team (SMT), and procurement committee, among others.

Parents' active involvement with their children's education at home and in school can have a significant effect on their children's academic performance and their future lives. According to research studies, such as those of Gurian (2012), the children whose parents were actively involved and were absent less frequently; behave better; and do better academically. Research by Jeynes (2005) showed that students with parents who are involved in their school tend to have fewer behavioural problems and better academic performance, and are more likely to complete school than students whose parents are not involved in their school. Among the questions the researcher asked the teachers and students was to rate the extent the heads of schools were involving parents in school matters. The findings indicate that the majority of the teachers and students, 67% and 65% respectively responded that heads of schools were involving parents in school matters to greater extent. When heads of schools were interviewed on the same issue, almost all of them said that they were involving parents in a variety of ways. These included requesting them to contribute in cash and labor power on such activities like academics, security, and porridge for breakfast of students, and constructions among others. They also involved parents in attending parents meetings which were being convened once in a semester (twice a year). The parents were in accord with the heads of schools on how they were being involved. Parental involvement in school matters goes beyond paying contributions and attending meetings. It involves parents creating a home environment that encourages learning, expressing high expectations for their children's achievement and future careers, and becoming involved in their children's education at school and in the community. It allows parents to monitor school and classroom activities, and to coordinate their

efforts with teachers to encourage acceptable classroom behavior and ensure that the child completes school. For example, parents themselves can be a rich resource to support teachers' practice in classrooms by facilitating children's learning. In this way, local villagers can come to schools and help students understand various species of trees and animals indigenous to that village, they can even participate in teaching, and especially those retired teacher parents.

The report from the heads of schools imply that parents were not being involved fully in school matters and in the whole process of teaching and learning, especially in matters pertaining to creating home environment to encourage learning, monitoring school and class activities, in supporting teachers as resource persons among others. This in turn, could affect the students' behavioral problems, better academic performance, and attendance besides contributing to truancy and poor performance in academics in these schools. These concur with Gurian (2012) who found out that the children of involved parents are absent less frequently, behave better, and perform academically better. According to these findings, despite all these various ways of involving them in school matters parents felt were not being involved fully. Again these findings deviate from Deming's 12th and 14th points which urge administrators to institute pride of ownership to the organization's stakeholders and put everybody in the organization to work to accomplish the transformation respectively. An educational institution's TQM initiative must be supported with a recognition and reward system that encourages and motivates teachers and students to achieve the desired performance. A growing body of academic research validates the use of recognition and rewards programmes to engage students and teachers, and motivate the behaviour necessary to generate positive academic outcomes (Leuven, Edwin, Oosterbeek, & Klaauw (2003). The forms of recognition can be a praise letter, an oral praise, award ceremony, publicly presenting successful working experiences and working condition improvement, among others.

An item on whether the schools give reward and recognition to outstanding performance was given to teachers and students. Table 1 summarizes the findings. About 42% and 23% of the teachers and students respectively said the school management was doing it to greater extent while another 42% and 47% of teachers and students respectively said that it was being practiced to lesser extent. Few of teachers and students, 8% and 15% were uncertain whereas 8% and 9% respectively said the practice was nonexistent. This was likely to discourage hard working among the teachers and students. The same question was set to the heads of schools. All responded by saying that they were doing it within schools' financial capacities. The awarding system was almost similar in all the schools studied. For instance, they awarded teachers whose students in national examinations scored best grades of A, B and C in the subjects they were teaching. In some schools, they did this at departmental level while in others at individual level. The amount of money for each grade differed from school to school. In some schools, grades A, B and C were awarded 20,000, 15,000 and 10,000 Tsh. respectively, whereas in other schools it was 15,000, 10,000 and 5,000 Tsh for A, B and C respectively. From the reports, the researcher established that other diverse rewards were given to staff which included verbal appreciations, having get together meals and drinks. Other

rewards included providing ten o'clock tea and in some schools lunch. In other instances, the teachers were involved in choosing the best worker among themselves. This could be given a certificate of recognition or cash or both. However, one head of school commented that they were not doing enough to motivate teachers because of luck of funds. He remarked: The government is not providing any funds for motivating teachers; we have to get funds from the parents, to ask them to contribute for that, people who are already fed up with a lot of contributions we are demanding from them (Interview: 16/4/2014).

On motivating students, heads of schools said those who excelled in academic performance (the 1st - 3rd in examinations) at the end of the term were rewarded with writing materials such as exercise books and pens. Also those who excelled in discipline, cleanliness or smartness and academics were rewarded in their fourth year, during graduation celebrations. They are normally given certificates indicating their areas of excellence. The DEO affirmed that schools had rewarding systems and that they were doing it well. It seemed that majority of the parents did not know how teachers and students were motivated. Only few could say that they motivated teachers by creating a good relationship and giving them items in appreciation. Recognizing people's work is an important aspect in motivating them. It is likely to enhance their self-esteem, productivity, quality and the amount of effort exhorted to the task at hand. Recognition is likely to be appreciated more when done immediately after action. Waiting to reward students at the end of their stay in a school (in form IV), or waiting to reward a teacher on Workers' day could have been demoralizing them. The findings imply that most of the Government secondary schools' managements in Ngara district lacked initiatives, and recognition and reward systems to recognize outstanding performance in the teaching and learning processes in their schools.

This could have been contributing to poor academic performance experienced in these schools. These findings imply that teachers and students productivity, quality and amount of effort to perform well were being affected. This could affect the practice of TQM and hence affect enhancement of quality education in Government secondary schools in Ngara district. The first, and overriding, feature of TQM is the organization's focus on its customers. Quality is defined as meeting or exceeding customer expectations (Sahney, Banwet & Karunes, 2003). Customer focus, apart from being the principle of TQM, is also one of the techniques to implement its practices. The researcher wanted to know whether Government schools in Ngara district had ways of taping customer satisfaction, ways to know whether they were meeting customers' expectations. The question was asked to teachers, heads of schools and parents who gave various responses. The responses of teachers are summarized in Figure 1. The findings in Figure 1 show that only 17% of the teachers confirmed to greater extent the presence of customer surveys, feedback processes and other key measures to assess customer satisfaction. The majority of teachers, 46% said it was being done to lesser extent while 14% of them highlighted that such a mechanism never existed in their schools. The heads of schools reported to have used varied means to obtain customer satisfaction. These include meetings with the staff, students (School Baraza and prefects meetings) to discuss issues with

them, to listen to their expectations, dissatisfactions and to decide on the way forward. Almost all the parents admitted having parents' meetings as their forum to air out their expectations.

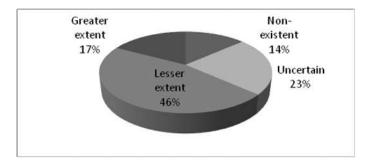


Figure 1. Teachers' Responses on the use of customer surveys and feedback processes to assess customer satisfaction

However, some parents had an opinion that Government and school management were not meeting their expectations effectively. One of the parents said:

Our expectations from these schools are that our children acquire education which gives them the capacity to perform well in national exams, to be well disciplined at school, at home and in the village; the education which will prepare them to get a good job in the future. But what we see now, mmmm! Our villages are full of form four failures! Every year almost all the students fail in these schools. These failures are even becoming nuisance in the village; they just roam around from morning to evening! They do not like shamba work! (Interview: 2/5/2014). Such products from some schools show that the kind of education was not of quality. Total Quality Management recognizes that a perfectly produced product has little value if it is not what the customer wants. These findings indicate that, despite the heads of schools saying they had mechanisms to measure and assess customers' expectations and satisfaction; parents were unsatisfied with what was going on in the whole process of teaching and learning. Again, following the remarks of the parent above, it seems their expectations, even if well known by the management, were not being achieved. The findings imply that these schools were in danger of falling into a problem of what Deming called dependence on mass inspection. In his theory, Deming urges management to cease dependence on mass inspection, to have many checks and balances, preventive approaches which could be achieved through getting opinions from customers of education by their interventions and hence save wastage of resources.

Recommendations

The Government, through MoEVT, should introduce TQM practices in its education system, which will include all Government secondary schools countrywide. It is hoped that applying particular aspects of TQM techniques to education will result not only in resource savings but also greater learning satisfaction and achievement for students. School management should maintain a close link with their customers, such as students, parents, staff, and Board of management, in order to know their requirements and to measure or monitor how it has been successful in meeting their expectations and satisfaction. Knowing the customer's needs and expectations serve to drive development of new service offering. Furthermore, school management should devise ways of involving parents in school

matters. For instance, by involving parents in creating a home environment that encourages learning, expressing high expectations for their children's achievement and future careers, by involving them in their children's education at school and in the community, and by acting as resource persons or even participate in teaching, especially those retired teacher parents among others. Additionally, schools should institute a policy where teachers are required to contact parents periodically throughout the year as half-term or end-of-term reports are often not enough.

School management should endeavor to foster teamwork spirit. The hierarchical nature is still dominant in many of the schools. Many schools tend to promote individual effort. Cross-department teams can and do promote stronger improvement if they are given a clear mission and strong authority, and supported rather than hampered by supervisors. Viewing students as customers implies that teachers should emphasize obtaining feedback from students as a means of determining their needs. Such feedback should yield concrete information that can guide everyday classroom management decisions concerning the teaching and learning process. Such feedback should be concise, simple, and regular. Teachers should empower students by involving them in the critical management decisions that affect them. They should empower students by giving them a real voice in deciding how their work is to be done and involve them directly in the process of planning and implementing the syllabus. The empowering goal here is to involve the student as a partner in his or her own learning. Parents should endeavor, at any cost, to fulfill their duties and obligation of educating their children. They should know that since they have given children their life they have a serious obligation to ensure that their offspring get education. They should create a home environment that encourages learning, expressing high expectations for their children's achievement and future careers, and they should involve themselves fully in their children's education at school and in the community. Students should foster the spirit of cooperative learning as opposed to competitive learning. They should approach their learning with enthusiasm and in a participative mood. This can be achieved through active interaction with others, by forming active study groups and by being responsible to the group and by engaging in heterogeneous grouping among others.

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