



## **ANALYSIS OF PRINCIPALS' AWARENESS OF TOTAL QUALITY MANAGEMENT STRATEGIES IN SECONDARY SCHOOLS IN RIVERS STATE**

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### **Abstract**

This study analysed principals' awareness of total quality management strategies in secondary schools in Rivers State. Three research questions were answered and three null hypotheses were tested at 0.05 level of significance. The descriptive survey design was adopted with a sample of 257 study participants made up of 208 male principals and 49 female principals of public senior secondary schools in the state. A structured questionnaire (QATQMS) was used as data instrument. The instrument was validated by three experts. Internal consistency co-efficient of 0.82 was obtained for the questionnaire using Kuder-Richardson (K-R 21) formula. Data were analyzed using frequencies and percentages for research questions, while chi-square statistics was used for hypotheses. The p-value was used to determine the significance of difference at 0.05 significant level. The result revealed that principals in Rivers State are aware of the three strategies of TQM which are: teacher development, teamwork and community involvement. From the result of the hypotheses, no significant difference was established in the responses of principals on all the variables of the study. The study recommended among others that the Rivers State Senior Secondary School Board in collaboration with the state ministry of education should make provision for intensive training of principals in TQM in order to increase their awareness and interest in the concept.

**Keywords: Awareness, total quality management, management strategies**

### **Introduction**

For any nation to rise to a standard worthy enough to compete favourably in the League of Nations, such a nation must ensure that high quality in her education is attained and sustained. Additionally, quality workforce calls for quality education which is an instrument highly indispensable in the transformation of individual values, beliefs and behaviour. Hence conscious efforts are usually made to ensure quality education at all levels.

The achievement of quality education being envisaged by the government is attainable if Total Quality Management (TQM) strategies are implemented, especially in the administration of secondary schools. Secondary education is the form of education students receive after primary school and before the tertiary stage. Secondary education plays a great role in imparting and equipping individuals with knowledge, skills, values and attitudes. Secondary schools in

particular are expected to prepare youths for useful living in the society and for coping with the demand for higher education (FRN, 2013).

The objectives of secondary education according to the Federal Republic of Nigerian (2013) include: providing students with diverse basic knowledge and skills for entrepreneurship and educational advancement, developing patriotic people equipped to contribute to social development and the performance of their civic responsibilities, inculcating values and raise morally upright individuals capable of independent thinking and who appreciate the dignity of labor and inspire national consciousness and harmonious co-existence irrespective of differences in endowment, religion, ethnic and socio economic background. To achieve these objectives, principals' awareness of Total Quality Management (TQM) strategies is crucial. This is because when principals are aware of these TQM strategies only then can they successfully apply them in school management.

Total Quality Management according to Nawelwa, Chanda, and Mwanza (2015) is a management approach that was introduced by Professor W. Edwards Deming in the 1950s to seek sources of continuous motion of improvement to provide quality products and services to customers or clients. Llantos and Pamatmat (2016), opined that TQM refers to an approach to organizational performance improvement distinguished by its key word "total" emphasizing a holistic or total approach to the school's improvement program. Total quality management as defined by Ojo (2008) is an administrative technique that is quality centered; customer-focused, facts-based, team-driven and seminar-led which aim at providing satisfaction to the realization of organizational objectives. Kalpana (2014) identified the following as key TQM strategies: focus on learning process, non-threatening assessment, teacher development, teamwork, decentralized management and community involvement. The focus of this study will be on principals' awareness of three of these TQM strategies which are: teacher development, teamwork and community development.

Teacher development involves all processes geared towards improving the ability of teachers in the performance of their jobs in terms of knowledge, skills, competencies, attitudes and professional growth. Principals of secondary schools should be aware of this strategy because in TQM framework, teachers are viewed as indispensable resources that must be continuously enhanced and empowered using various developmental programmes and other motivational measures. As a matter of fact, Njeru (2011) upheld that TQM advocates for continuous training of teachers until they achieve as much as they can within the limits of the system in which they operate. This is because when institutions develop their teachers they enhance their skills, competencies and overall performance, and in return the institutions benefit from their empowerment.

In addition to the strategy above, the teamwork strategy is important for providing a quality work environment that encourages strong staff commitment to continuous improvement of the school system. Teamwork refers to the collective efforts of individuals utilized towards the actualization

of a common vision or goal. Teamwork is not a one man's affair but a collective collaboration that is founded on the abilities of different individuals. Ndu (2013) corroborated this idea by stating that a successful school requires more than just individual efforts but teamwork to accomplish the many tasks involved in teaching all subjects and in guiding students into acceptable behaviour. TQM is a management concept that believes and values team results more than individual results because, with team results there is a boost to employee morale as employees pride themselves in their teams' successes or achievements. Hence, teamwork remains an important strategy of TQM even in school settings.

Another TQM strategy principals should be aware of is community involvement. Community involvement in education refers to the participation of the host community of the school in its affairs. The school principal can involve the host community through the community members of which the parents constitute an important segment. Oluwuo and Obasi (2006) re-affirmed that it is generally believed that when parents and other members of the community get involved in school management, their children benefit. Perhaps that is why for TQM schools, parents and community are not mere beneficiaries but important customers as well as partners in the quality improvement of the school. Consequently, their opinions and expectations are involved in the school programmes and participatory decision making. In this way the school principals are able to stimulate their interest and obtain their support in the education of their children. Involving the community in school affairs denotes a collaborative approach to school management which is at the center of TQM.

The importance of TQM and its strategies is evident and literature corroborates the use of TQM strategies in the school system. This connotes that awareness of TQM strategies by male and female principals is also important. However, principals of secondary schools in Rivers State appear not to be aware of TQM strategies. There is a growing concern that a relatively large number of public secondary schools across the state is in a deplorable condition with dilapidated structures, inadequate and poorly maintained facilities, non-motivated teachers, examination malpractices and other indiscipline problems. The poor state of the schools is not only unpleasant but also detrimental to the quality of education that students receive. This is believed to have contributed to the high rate of unemployment among secondary school leavers since a reasonable percentage of them come out as unemployable graduates. Not only does this serve as an indicator that the secondary schools seem not to be attaining the objectives for which they are established, it is also an indication of possibility that the existing management practice by principals is deficient. Putting these situations in perspective, one is in doubt about the awareness of TQM strategies by secondary school principals in Rivers state.

### **Statement of the Problem**

It has been observed that public secondary schools in Rivers state over the years have been suffering due to inadequate educational facilities for effective teaching and learning, poor maintenance of existing ones, lack of commitment by principals, lack of teamwork, poor

communication and lack of adequate funding. Studies have continued to report the decline in academic achievement and discipline, lack of effective evaluation, monitoring, inspection and supervision in the areas of human relationships, personnel, facilities, equipment and infrastructure in public secondary schools in Rivers State. This situation has resulted to most parents withdrawing their wards from public secondary schools in the state to private schools. The researcher is, however, in doubt about the position of principals with regard to their awareness of TQM strategies which are essential for quality in secondary schools in Rivers State. Hence, the problem of this study is to ascertain the awareness of TQM strategies by principals in the state.

### **Purpose of the Study**

The aim of the study was to ascertain the awareness of TQM strategies by secondary school principals in Rivers State. In specific terms, the study was intended to:

1. Determine awareness of the strategies of teacher development by principals in Rivers State.
2. Determine awareness of the strategies of teamwork by principals in Rivers State.
3. Determine awareness of the strategies of community involvement by principals in Rivers State.

### **Research Questions**

The following questions were raised to provide answers for the study:

1. What is principals' awareness of the strategies of teacher development by principals in Rivers State?
2. What is principals' awareness of the strategies of teamwork by principals in Rivers State?
3. What is principals' awareness of the strategies of community involvement by principals in Rivers State?

### **Hypotheses**

These hypotheses were formulated for the study and were tested at 0.05 level of significance:

1. Male and female principals do not differ significantly in their awareness of teacher development strategies.
2. Male and female principals do not differ significantly in their awareness of teamwork strategies.
3. Male and female principals do not differ significantly in their awareness of community involvement strategies.

## Method

The descriptive survey design was adopted for the study. This design according to Nworgu (2015) is one which seeks to describe certain variable in relation to a given population. The study was guided by three research questions and three null hypotheses which were tested at 0.05 level of significance. The study was carried out in Rivers State on a population of 257 principals of all the senior secondary schools of the state. A questionnaire instrument titled “Questionnaire on Awareness of Total Quality Management Strategies (QATQMS)” was used to collect data for the study. The instrument was validated by three experts. A reliability coefficient of 0.82 was obtained using Kuder-Richardson (K-R 21) formula. Data collected for the study were analyzed using frequencies, percentages and chi-square statistics.

## Results

**Table 1: Frequency and percentage responses on principals’ awareness of the strategies of teacher development N=253**

S/N	Items	Aware		Not Aware		Remark
		freq	%	freq	%	
1.	The principal should prepare and submit proposals for teacher development programmes to Rivers State Senior Secondary Board (RSSSB)	179	70.8	74	29.2	Aware
2.	The principal should plan and direct in-school development programmes in specific subjects	200	79.1	53	20.9	Aware
3.	The principal should ensure that teachers are certified members of professional bodies (e.g Teachers Registration Council of Nigeria, TRCN)	190	75.1	63	24.9	Aware
4.	Promotion opportunities for teachers should be regular to encourage their professional growth.	175	69.2	78	30.8	Aware
5.	Teachers should be trained in Total Quality Management (TQM) methods	105	41.5	148	58.5	Not-Aware

The percentage responses of principals in Table 1 show that over 50% of the principals indicated that they are aware of four out of the five listed teacher development strategies which include that: the principal should prepare and submit proposals for teacher development programmes to Rivers State Senior Secondary Board (RSSSB); principal should plan and direct in-school development programmes in specific subjects; principal should ensure that teachers are certified members of professional bodies (e.g Teachers Registration Council of Nigeria, TRCN) and that promotion opportunities for teachers should be regular to encourage their professional growth. The principals however affirmed they are not aware of the remaining one strategy which is that teachers should be trained in Total Quality Management (TQM) methods.

**Table 2: Frequency and percentage responses on principals' awareness of the strategies of teamwork N=253**

S/N Items	Aware		Not Aware		Remark
	freq	%	freq	%	
6. Teachers should be encouraged to work as colleagues in teams or groups for more effective outcomes.	147	58.1	106	41.9	Aware
7. Students should be made part of the working team in the school.	147	58.1	106	41.9	Aware
8. Team work is encouraged by defining the school vision and missions to school members	128	50.6	125	49.4	Aware
9. Teamwork is important in harnessing the diversities in teachers and other staff.	193	76.3	60	23.7	Aware

The analysis in Table 2 shows the frequency and percentage responses on principals' awareness of the strategies of teamwork. The analysis indicates that over 50% of the principals affirmed their awareness of the four listed strategies of teamwork in secondary schools in Rivers State.

**Table 3: Frequency and percentage responses on principals' awareness of the strategies of community involvement N=253**

S/N Items	Aware		Not Aware		Remark
	freq	%	freq	%	
10. The need for regular communication by the principal with parents on school events	203	80.2	50	19.8	Aware
11. The importance of allowing community members to serve in school-based management committees	189	74.7	64	25.3	Aware
12. The importance of honouring deserving community members/parents with awards (e.g certificates of merit)	155	61.3	98	38.7	Aware
13. The need to arrange for old students of a school to be involved in the affairs of the school	156	61.7	97	38.3	Aware

The responses of principals on the awareness of community involvement strategies in Table 3 show that principals are aware of the four community involvement strategies listed. This is indicated by over 50% of principals that affirmed their awareness of the four strategies in Rivers State.

**Table 4: Chi-square analysis of the difference in male and female principals' awareness of teacher development strategies**

S/N	Items	Male (N=205)		Female (N=48)		X <sup>2</sup>	P-value	Remark
		Aware	Not Aware	Aware	Not Aware			
1.	The principal should prepare and submit proposals for teacher development programmes to the Rivers State Senior Secondary School Board (RSSSB)	141(68.8)	64(31.2)	38(79.2)	10(20.8)	2.02	.21	NS
2.	The principal should constitute and use school committees that plan for in-school seminars	163(79.5)	42(29.5)	37(77.1)	11(22.9)	.13	.69	NS
3.	The principal should ensure that teachers get registered and licensed with the Teachers Registration Council of Nigeria (TRCN)	157(76.6)	48(23.4)	33(68.8)	15(31.2)	1.27	.26	NS
4.	Promotion opportunities for teachers should be regular to encourage their professional growth.	145(70.7)	60(29.3)	30(62.5)	18(37.5)	1.23	.29	NS
5.	Teachers should be trained in Total Quality Management (TQM) methods	84(41.0)	121(59.0)	21(43.8)	27(56.2)	.12	.74	NS

In Table 4, all the five teacher development strategies listed had p-value greater than the stipulated 0.05 level of significance. This indicates that there is no significant difference in male and female principals' responses on their awareness of teacher development strategies in Rivers State. The null hypothesis of no significant difference between the two groups was therefore not rejected.

**Table 5: Chi-square analysis of the difference in male and female principals' awareness of teamwork strategies**

S/N	Items	Male (N=205)		Female (N=48)		X <sup>2</sup>	P-value	Remark
		Aware	Not Aware	Aware	Not Aware			
6.	Teachers should be encouraged to work as colleagues in teams or groups for more effective outcomes.	123(60.0)	82(40.0)	24(50.0)	24(50.0)	1.59	.25	NS
7.	School-based committees should be used to execute some administrative tasks	121(59.0)	84(41.0)	26(54.2)	22(45.8)	.37	.62	NS
8.	Team work is encouraged by defining the school vision and missions to school members	103(50.2)	102(49.8)	25(52.1)	23(47.9)	.053	.87	NS
9.	Teamwork is important in harnessing the diversities in teachers and other staff.	154(75.1)	51(24.9)	39(81.2)	9(18.8)	.80	.45	NS

Table 5 shows that the four listed teamwork strategies had p-values greater than the stipulated 0.05 level of significance. This indicates that there is no significant difference in male and female principals' responses on teamwork strategies in Rivers State. The null hypothesis of no significant difference between the two groups was therefore not rejected.

**Table 6: Chi-square analysis of the difference in male and female principals' awareness of community involvement strategies**

S/N	Items	Male (N=205)		Female (N=48)		X <sup>2</sup>	P-value	Remark
		Aware	Not Aware	Aware	Not Aware			
9.	The need for regular communication by the principal with parents on school events	165(80.5)	40(19.5)	38(79.2)	10(20.8)	.04	.84	NS
10.	The importance of allowing community members to serve in school-based management committees	154(75.1)	51(24.9)	35(72.9)	13(27.1)	.10	.71	NS
11.	The importance of honouring deserving community members/parents with awards (e.g certificates of merit)	126(61.5)	79(38.5)	29(60.4)	19(29.6)	.01	.89	NS
12.	The need to arrange for old students of a school to be involved in the affairs of the school	126(61.5)	79(38.5)	30(62.5)	18(37.5)	.01	.89	NS



The analysis in Table 6 shows that there is no significant difference in the responses of male and female principals on their awareness of community involvement strategies in Rivers State. All the four community involvement strategies had p-value greater than the stipulated 0.05 level of significance. The null hypothesis of no significant difference between the two groups was therefore not rejected.

## **Discussion of Results**

### **Principals' Awareness of Teacher Development Strategies**

The percentage responses of principals in Table 1 reveal that they are aware of four listed teacher development strategies but are not aware of one. In Table 4, the results also reveal that male and female principals do not differ significantly in their awareness of teacher development strategies. Going by the two results, it is confirmed that principals in Rivers State are aware of TQM strategies of teacher development. In other words, the principals have a good understanding of the strategies. They know that it is the duty of principals to prepare and submit proposals for teacher development to the school board, and also to plan and direct in-school development programmes for specific subjects. They also acknowledge that it is of benefit to ensure that teachers are certified members of professional bodies, and also that promotion opportunities for teachers should be regular to encourage their professional growth. Principals' awareness of teacher development strategies could be attributed to the fact that the National Policy on Education has detailed stipulations concerning teacher training and education in Nigeria.

By and large, the importance of principals' awareness of teacher development strategies cannot be over emphasized. This is because teachers occupy a central position in harnessing the administrative and material resources necessary to blend with students. Thus, they are the most decisive factor in the teaching and learning process. Through training and development strategies, teachers are able to update their knowledge, skills and interests so they can remain qualified to carry out their duties to the students. Indeed, it is for the purpose of enhancing teacher quality that the concept of TQM advocates that training and development of teachers should be made a continuous process that will last through a teacher's entire working life.

In line with the findings of this study, Chiemeka-Unogu (2018) also found that in-service trainings, workshops, seminars and conferences are staff development programmes that principals in Rivers State were very much aware of and in which the principals themselves participated in so they can continuously update their knowledge as well as their leadership and management skills. Chiemeka-Unogu affirmed that, primarily, the impact of staff development is knowledge growth, skill development and attitude modification which in turn impacts positively on employee's productivity. That is why principals' awareness of staff development is vital for improving teacher effectiveness and student learning. The findings are also in congruence with

Llantos and Pamatmat's (2016) study which showed that principals in Philippines were aware of the principles of TQM which included staff development programmes for teachers.

It must at this juncture be recalled that principals indicated that they are not aware of the strategy that teachers should be trained in TQM methods. The fact that principals are aware of other teacher development strategies suggests that development programmes for principals in Rivers State do not include training in TQM activities. In such situation, it unlikely that principals will really appreciate the need to train their teachers in TQM methods. There is no doubt that training of principals in TQM activities will afford them the opportunity of getting familiar with the idea of training teachers in TQM methods.

### **Principals' Awareness of Teamwork Strategies**

The findings in Table 2 reveal that principals are aware of the four listed strategies of teamwork. In Table 5, the findings also reveal that male and female principals do not differ significantly in their awareness of teamwork strategies. The interpretation of the results is that principals know that teachers should be encouraged to work as colleagues in teams for more effective outcomes, and students should be made part of the working team in the school. They also know that teamwork should be encouraged by defining the school vision and missions to school members, and teamwork is important in harnessing the diversities in teachers and other staff. It is therefore adjudged that, in general, principals in Rivers State are aware of TQM strategies of teamwork. The awareness by principals of the teamwork strategies is commendable. This is because teamwork is recognized as a very essential component in the implementation of TQM in organizations including school organizations. There is no gainsaying that principals' awareness of teamwork will help them in focusing on building an effective system in which interdependence of staff, effective communication and trust among staff exist for quality in the functioning of the school. Principals' awareness of teamwork is also beneficial for achieving continuous improvement in students' academics. This is because teamwork in secondary schools can be organized by departments to afford subject specialists in each department the opportunity to brainstorm and find solutions to problems in their different areas.

The findings on principals' awareness of teamwork tally with that of Llantos and Pamatmat (2016) whose results indicated that principals in Philippines were aware of TQM practices that included teamwork. The findings are equally supported by those of Guillermo (2018) and McEwan, Ruissen, Mark, Zumbo and Beauchamp (2017). The results of Guillermo's research showed that secondary school leaders in Columbia were aware of team principles. Thus, it was concluded in the research that a good way to improve the behavior of members of school teams was to improve the psychological characteristics of the school leader that included his level of awareness of team principles. The results of the study by McEwan, Ruissen, Mark, Zumbo and Beauchamp revealed that team leaders who were selected across several context in Netherlands (academics, healthcare, military and aviation) were aware of teamwork strategies and this was

beneficial for team improvement. Conversely, the findings of this study do not tally with that of Ojo's (2008) study which showed that many universities in Ethiopia did not have quality circles (an aspect of teamwork) because their management seemed not to have knowledge of the culture of TQM. In any case, there should be an explanation for the awareness of teamwork strategies by principals in Rivers State. Perhaps, by interacting and sharing of information amongst themselves, more principals are becoming aware of the importance of encouraging collaborative work practices amongst staff via teamwork

### **Principals' Awareness of Community Involvement Strategies**

The percentage responses of principals in Table 3 reveal that they are aware of the four community involvement strategies listed. In Table 6, the results also reveal that male and female principals do not differ significantly in their awareness of community involvement strategies. This set of results is a confirmation that irrespective of gender, principals in Rivers State are aware of community involvement strategies for school improvement. This suggests that principals in the state are aware that it is important to involve the parents, old students and other community members in the affairs of the school via school-based management committees and other avenues. The principals also know the importance of honouring deserving parents/community members as the need arises. On the whole, the principals understand that their position as school leaders implies that they are also leaders in the community of the school. As leaders in the community, principals should be able to carry the members of the community along in managing the schools. Indeed, the awareness of community involvement strategies by principals is important for exploring ways of developing a bonding with the community that will be beneficial to the continuous improvement of schools. The awareness of community involvement strategies by principals in Rivers State is not surprising. This is because the National Policy on Education also provided for close participation and involvement of communities at the local level in the administration and management of schools in their environment. Nevertheless, the principals may also have a genuine interest in ensuring the cooperation and support of community members in running the schools.

The above results on principals' awareness of community involvement strategies agree with the results of Llantos and Pamatmat (2016) which found that principals in Philippines were aware of TQM principles that included involving community members in matters of the school. On the contrary, these results disagree with Kaegon (2008) which discovered that public secondary school principals in Bayelsa State were not aware of TQM principles including community involvement. The principals in private school were more aware of TQM principles than their counterparts in public schools.

### **Conclusion**

Based on the results of the study, it is concluded that, principals in Rivers State are aware of TQM strategies of teacher development, teamwork and community involvement.

## Recommendations

The following recommendations were made based on the results of the study:

1. Rivers State Senior Secondary Schools Board (RSSSSB) in collaboration with the state ministry of education should make provision for intensive training of principals in TQM in order to increase their awareness and interest in concept.
2. Principals should make more efforts to invite professional resource persons for in-school development programmes for teachers on TQM methods.
3. The ministry of education should consider using other avenues to create more awareness for school principals to embrace TQM strategies in schools, for example using enlightenment campaigns.

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