Servant-Leadership and Secondary Schools Principals' Effectiveness in Nigeria

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Abstract

This study examined servant-leadership and secondary schools principals' effectiveness in Nigeria from 2005 to 2009. As a Correlation and ex-post facto research designs, it made use of 1200 principals of public secondary schools through proportionate stratified random sampling techniques which cut across the six geo-political zones of Nigeria. Three research questions and three hypotheses were raised and tested in the study. Data were collected through the use of developed instruments styled, Principal Servant Leadership Questionnaire (PSLQ) and Principal's Leadership Questionnaire (PLQ). The instruments were validated and used for the study, while reliability coefficient was found to be r=0.81 for PSLQ and r= 0.92 for PLQ. Data were analyzed through descriptive and inferential statistics tools. Leadership style with a means score of 4.0 and above was classified as servant leadership style and those with 3.0-3.9, 2.0-2.9, and below 1.9 were classified as democratic, autocratic and laissez-faire respectively. The study found that variations existed among leadership styles and public Secondary School principals' effectiveness with servant-leadership style being more effective than the autocratic, democratic, laissez faire styles. The result of the hypotheses tested indicated that significant relationship existed in the means of servant leadership and academic performance. Also, there was a positive and significant relationship in the mean between servant leadership principals' and staff discipline, while negative and non-correlation existed between servant-leadership and students' discipline. From these results, it was discovered that servant leadership has a symbiotic relationship with public Secondary School principals' effectiveness across the geo-political zones of Nigeria, and this presented sufficient evidence for recommendations

Keywords: Effectiveness, Management climate, Servanthood, Contingency approach, Pyramidal position.

Introduction

Organizations are set up to achieve various broad and specific objectives. The achievement of these objectives in either the public or private enterprise is determined by the availability of certain inputs in the form of man, machine, materials and money which is usually referred to as the fours of management. At every layer of an organizational structure are sets of individuals imbued with visions and other leadership qualities, persuading others to share the vision and willingly to work towards its accomplishment (Sanyaolu and Fanimo, 2007). It should be noted without contradiction that of all these inputs, man, otherwise known as labour or human resource, which refers to the different categories of workforce, managerial, technical, supervisory and general duties in an organization, is the most complex to manage.

The reasons for this complexity are attributable to individual differences and uniqueness, individual goals and aspirations, individual needs and preferences, divergent interests of the individual compared with that of the organization as well as the individual capabilities and aptitudes. This is supported by Aguda (2008) that management and leadership is the vehicle by which purposes are fulfilled. All the factors, which directly affect the workers or staff response in an organization, are determined by the management. These factors also constitute the management climate. Looking at people as a resource is not always easy to conceptualize. This is because their abilities are not owned by the organization as the latter own equipment, machines, buildings, technology and time. Such abilities (of the workers) do not appear in the organization's final account books, yet such abilities are resources, they cost money, and with proper management they bring returns. Although, a single resource is seldom productive all by itself; people need tools, materials, a place to work and others to work with.

According to Fingel (1999), traditional Leadership approach emphasizes trait and a strong centralized, authoritarian style of administration, while the emerging leadership thinking is anchored on servanthood. Servant Leadership develops, as Brown (1999) puts it from the primary motivation to help others, even if this will mean taking a risk. Such a leader, if he is worth his salt must be ready to risk everything, even his life. (Solarin, 1994). Therefore, the success or failure of such people playing leadership role at any level, no matter how high or low in the pyramidal structure of the organization may affect the entire system either positively or negatively.

Apart from the need to acquire the financial and other physical resources, the difficulty of providing effective leadership in most organizations has recently grown considerably more than ever before. This development may have arisen partly because of the intense competition between private and public institutions and the increasingly molten, complex and uncertain business environment. This therefore calls for a paradigm shift from the traditional leadership approaches to the emerging servant leadership model to meet the emerging challenges. Over the years, records have shown that the average Nigerian worker had often been in conflict with his employer as a result of unsatisfactory leadership. The servanthood model characteristics (valuing people, developing people, building community, sharing leadership, displaying authenticity and providing leadership) as identified by its advocates, Greenleaf (1977), Farling, Stone and Winston (1999), Spear (2002), offer a viable alternative leadership model for effective service delivery by school principals, towards the attainment of academic excellence, which is the cardinal education policy in Nigeria.

Today, empirical research has shown that solving organizational leadership related problems in Nigerian Secondary Schools, goes beyond reliance on the existing traditional leadership model. Jimoh (2004) notes that a typical Nigerian School today is characterized by teachers and students' indiscipline ranging from examination malpractices, improper dressing, and lateness to school to poor attitude to work.

Theoretical Framework

This study is hinged on servant-leadership theory as propounded by Greenleaf (1970). Over the year, three major leadership theories which are known to have stimulated academic debates are traits approach, the leader's behaviour approach and the contingency approach. Greenleaf attempts to build on the assumptions of these theories by looking at the role of leaders and the view the leaders have of others. Greenleaf believes that where servant-leadership is being practised " all men and women who are touched by the effort grow taller, and become healthier, stronger, more autonomous, and more disposed to serve". This theory therefore presupposes that: leaders should reject the idea that followers are to be used, competed with or judged. Also, leaders should see followers as partners in progress and that power must be to promote the good of the people they are leading.

It is of interest to mention that Greenleaf was a committed teacher who spent most of his active life in public service to reflect on what true leadership should be and how individual expression of readiness to serve may be a conscious choice that may bring him to aspire to lead. Here lies the difference between leader first and the servant first, the two, which are extreme types of leaders with the servant first leader taking care to make sure other people's highest priority needs are being served. In his submission, Patterson (2003) equally corroborated this assertion that servant leaders are those leaders who lead an organization by passing on their followers such that the followers' interest become more paramount over and above the leaders self interest and ego sponsored activities. Greenleaf metaphorical categorization of a leader as servants as against the traditional top-bottom pyramidal conception lays bare the paradoxical use of power and authority.

Traditionally, leaders are perceived as the boss occupying the top pyramidal position in the organizational structure in possession of power and authority to enforce compliance irrespective of the impediment they pose to result delivery.

Greenleaf elucidation of servant leadership however turns the traditional hierarchical pyramid upside down with the leader at the base and the organizational roles reversed (Kelly and Williamson, 2006). His assumption promotes a new paradigm, a paradigm of respect and dignity for subordinates. It also calls for collaboration, trust, empathy and the ethical use of power and authority. The objective is to enhance the growth of individuals in the organization and increase teamwork and personal involvement.

Servant-leadership and Secondary School Effectiveness

Spear (2002) remarks that servant leadership attempts to enhance the personal growth of organization members and improve the organization through a combination of teamwork, shared decision-making and ethical caring behaviour. Therefore, principals who fit a servant leadership model emphasized service to others, a holistic approach to work, a sense of community and shared decision making (Kelly and Williamson, 2006) such principals exhibits the servant leadership characteristics of valuing people, developing people, displaying authenticity and sharing leadership as identified by Greenleaf. Hamilton (2008) highlighted several of such expected benefits to be derived from a servant led organization, to include: Mission and value focus; Creativity and innovation; Responsiveness and flexibility; a commitment to both internal and external services; a respect for employees' loyalty, and a celebration of diversity

Jacobs and Kristanis, (2006) in a comparative study of high and low performing schools to the extent that organizational servant leadership qualities are used. The study utilized the Organizational Leadership Assessment (OLA) to determine if successful schools have influential principals with more servant-leadership characteristics than principals in less successful schools.

The study reveals servant-leadership as an ideology that provides the framework to accomplish the relationship and motivation needed for successful schools in a challenging society. This corroborates Greenleaf's (1997) theoretical perspective on the applicability of servant-leadership to school as an organization. Very often, school successes are measured from the output angle which includes student achievement, tone of the school, staff turnover rate, among others. David's (2003) study conducted to determine the relationship between servant-leadership and school effectiveness found that a positive correlation exists between servant-leadership and students achievement. Thus, confirming that servant leadership may influence leadership effectiveness and student achievement.

The study which utilized the OLA developed by Laub (1999) gathered data from 24 high schools in Florida. However, the study did not find any correlation between other contextual variables and servant leadership. This agrees with some of the findings of earlier studies conducted (Freitus 2003, Jason 2006, Steven, 2007).

Statement of the Problem

In Nigeria, before the period of political independence, it was more or less difficult to classified secondary school leadership behaviours due to the fundamental challenges associated with the colonial rule. But the post independence era of 1960s reveal the differentials in the leadership ideology of the Nigerian leaders who were believed to have inherited this from the colonial masters. Despite the humongous cost on secondary education development by various Nigerian Governments, there are allegations from various quarters on the falling standard of education in Nigeria particularly the secondary education in this era of globalization.

With a minimum passes in some selected subjects, students' academic performance, in 2004, an average of 66.3 % passed, while an average of 33.7% failed. This trend of students' success was observed in 2005(68.3%), 2006 (74.2%), 2007 (72%), and 2008 (72%). While 31.7%, 25.8%, 28%, and 28% failed respectively this shows that the performance is not too bad. (See appendix i). But, on effectiveness scales of credit passes in English language and Mathematics which guarantee progression into higher institutions in the country, performance from 2004 to 2008 reveal that academic effectiveness drops (See appendix ii). Perhaps, this may the reason why some school of taught believe that the standard of education in Nigeria is falling. With this background, the researchers have the quest towards carrying out a situational analysis of leadership with a particular emphasis on servant-leadership as a correlate to the academic performance (effectiveness) of public Secondary Schools in Nigeria.

Today, neither the traditional perspective on leadership as a product of natural endowment and traits of personality nor the situational factor approach is sufficient to give the education sector the leverage required. The reality is that most of the unwholesome development in our national life including large scale corruption, the mismanagement education funds and other unethical activities are evidence of true and effective leadership vacuum permeating Nigerian social–political and economic atmosphere.

Purpose of the Study

The main purpose of this study therefore is to: identify servant-leadership as an emerging leadership model appropriate for tackling the school organizational leadership-related problems of modern school principals in the face of the mounting diverse and complex challenges in Nigeria secondary schools.
The study therefore was aimed at determining among other things:-

- the link between servant-leadership and principals' effectiveness and
- the link between servant-leadership and school performance

The importance of this study cannot be over emphasized considering the fact that little research has been documented on comprehensive study conducted on servant-leadership and the secondary school Principals' effectiveness in Nigeria to date.

Research Questions

The following research questions guided the study:

1. Is there any relationship between servant-leadership and principals' effectiveness on students' academic performance in public examinations in Nigeria Secondary Schools?
2. Is there any relationship between servant-leadership and principals' effectiveness in staff discipline in Nigeria Secondary Schools?
3. Is there any relationship between the servant-leadership and principals' effectiveness in handling students' discipline in Nigeria Secondary Schools?

Hypotheses

H.O.1 There is no relationship between servant-leadership and principals' effectiveness on students' academic performance in public examinations in Nigeria Secondary Schools?
H.O.2 There is no relationship between servant-leadership and principals' effectiveness in staff discipline in Nigeria Secondary Schools?
H.O.3 There is no relationship between the servant-leadership and principals' effectiveness in handling students' discipline in Nigeria Secondary Schools?

Methodology

Design

This study specifically adopted the survey method of descriptive research design.
It is considered as a suitable available research design for the purpose of description of Principals' servant-leadership variable as it affects the academic performance of secondary education delivery.
The population of this study comprised of all the 18,234 Secondary Schools in Nigeria.

Sample and Sampling Techniques

Nigeria is made up of six geo-political zones namely: North-West, North-East, North-Central, South-South, South-East, and South-West. Thus, a purposive simple random sampling method was adopted to arrive at 200 Public Secondary Schools in each geo-political zone. However, a total of 1,200 principals were used for the study.

Instrumentation

The instrument for data collection was the Principals' Servant-Leadership Questionnaire (PSLQ) and the Principals' Leadership Questionnaire (PLQ). These instruments were used to elicit information from respondents regarding their servant leadership status. Each consisted of 30-items based on Likert scale format of Strongly Agree (SA) = 4 points, Agree (A) =3 points, Disagree (D) = 2 points, and Strongly Agree (SA) = 1 point.

The questionnaire was subjected to face and content validity by colleagues, and test-retest reliability method. The reliability value was 0.81 for PSLQ and 0.92 for PLQ which indicated that the instruments are reliable before administration.

The researchers with the assistance of two graduate students administered the questionnaire to the respondents. Completed copies of the questionnaire were retrieved immediately.

The statistical tool used to analyze the data comprised of simple descriptive statistics such as mean and standard deviation, and Pearson Product Moment Correlation Coefficient at a level of 0.05.

Results

Answer to Research Questions

In an attempt to identify the leadership styles adopted by the principals of Secondary Schools in Nigeria, the mean of responses on the instruments PLQ and PSLQ was obtained and these were projected on a general basis of leadership styles and of servant-leadership style.

The preliminary task that was performed involved classifying the Secondary School Principals into four discrete leadership units.

Autocratic Leadership, Democratic leadership, Laissez-faire leadership, and Servant-leadership
To determine this grouping, the mean of responses of the respondents in the different schools and states was obtained. The computation was based on scores for leadership style classification aggregate mean as follows:

Table 1: *Classification of Public Secondary School Principals' Leadership styles in Nigeria*

Servant Leadership Style	Mean 4.0 and above
Democratic Leadership Style	Mean 3.0 - 3.9
Autocratic Leadership Style	Mean 2.0 - 2.9
Laissez- faire	Mean 1.9 below

From the mean derived in Table 1, this was re-shuffled to determine the frequency of principals' leadership styles.

Table 2: *Frequency of Leadership Style of Principals of Public Secondary Schools in Nigeria*

Geo-Political Zones	AS M F	M/F	DS M F	M/F	LF M F	M/F	SL M F	MF	Total
South East	28 28	56	38 38	66	28 23	51	18 9	27	**200**
South South	28 39	67	37 18	55	38 19	57	13 8	21	**200**
South West	28 38	66	28 19	47	28 28	56	18 9	31	**200**
North East	37 38	75	40 33	72	9 18	32	12 9	21	**200**
North West	18 38	56	36 35	71	28 29	57	10 6	16	**200**
North Central	28 35	63	35 28	63	38 18	56	11 7	18	**200**
Total		**383**		**374**		**309**		**134**	**1200**

Source: Fieldwork

AS=Autocratic Style, DS= Democratic Style, LF= Lassez faire Style, SL= Servant- Leadership Style

Table 2 reveals a higher frequency of 383(31.9%) principals' fall within the autocratic leadership style and this represents the highest portion while the frequency of 374(31.2%) Principals, 309(25.7%) Principals and 134 (11.2%) Principals fall with the democratic, laisser-faire and servant leadership styles respectively. However, it is instructive to note that this study centre's on servant-leadership and secondary school principals' effectiveness. The data on servant-leadership was re-shuffled to answer the research questions accordingly.

Table 3: *Summary of Average Percentage Students Academic Performance of SSCE Vis-a-Vis Principals' Leadership Styles in Nigeria between 2004 and 2009*

Leadership styles	% of student with 5 credits plus Eng. and Maths	% of students below 5 credits	% of students with failure	% Total
Autocratic	61.88	21.54	16.58	100
Democratic	57.9	24.4	17.7	100
Laissez-faire	42.66	39.52	17.82	100
Servant	65.22	21.46	13.32	100

Source: Fieldwork

Table 3 reveals that a highest percentage of 65.22 students with 5 credits including English Language and Mathematics were recorded in schools where Principals' adopted servant-leadership approach. This was followed by Autocratic Style with 61.88% and 57.9% for Democratic while Laissez-Faire had the least of 42.66%. Also, percentage of students with failure was recorded with 17.82% for Laissez- Faire leadership style, followed by 17.7% and 16.58% for Democratic and Autocratic leadership styles respectively while SL styles has the least percentage of students failure of 13.32%.

Hypotheses Testing

H.O.1 There is no significant relationship between servant-leadership and principals' effectiveness on students' academic performance in external examinations in Nigeria Secondary Schools?

Table 4: *Percentage Academic Performance and Servant Leadership Principals' Effectiveness in Public Secondary Schools in Nigeria*

Variables	N	Mean	SD	r-cal	r-tab	Decision
Servant-Leadership	134	40.29	9.8641	0.66	0.20	*
Academic Performance	134	12.86	5.7651			

*Correlation is significant at 0.05 level (2-tailed)

Table 4 reveals that there is a positive and significant relationship between servant leadership and principals' effectiveness in students' academic performance in public Secondary Schools. Thus, r- cal > r- tab (r=0.66, P<0.05). This implies that the null hypothesis is rejected.

H.O.2 There is no significant relationship between servant-leadership and principals' effectiveness in staff discipline in Nigeria Secondary Schools?

Table 5: *Servant Leadership and Principals' Effectiveness in Staff Discipline of Public Secondary Schools in Nigeria*

Variables	N	Mean	SD	r- cal	r-tab	Decision
Servant Leadership Principals	134	54.39	17.79	.86	.20	*
Staff Discipline	134	12.84	6.8			

* Correlation is significant at 0.05 level (2-tailed)

The Table 5 shows a negligibly positive and significant relationship between servant- leadership and staff discipline in public Secondary Schools. (r=0.86, P<0.05). This implies that posited hypothesis is accepted.

H.O.3. There is no significant relationship between the servant leadership and principals' effectiveness in students' discipline in public Secondary Schools in Nigeria.

In testing this hypothesis, a Pearson's product moment correlation co-efficient was used to determine if significant relationship exists between the means of servant leadership and students' discipline among the sampled schools.

Table 6: *Between Organizational Servant Leadership and Principals' Effectiveness in Student Discipline of Public Secondary Schools in Nigeria*

Variables	N	Mean	SD	r- cal	r-tab	Decision
Servant Leadership Principals	134	40.70	9.6399	- .706	.20	NS
Students' Discipline	134	16.50	7.6843			

NS= Correlation is not significant at 0.05 level (2-tailed)

The result of the test performed indicates that there is a negative and non- significant relationship between organizational servant leadership and principals' effectiveness in student discipline in Nigeria public Secondary Schools (r= - .706, P> 0.05). This implies that the hypothesis which states that there is no significant relationship between the servant leadership and principals' effectiveness in students' discipline in public Secondary Schools is accepted. The negative value is an indication of an inverse relationship, that is, as one variable increases, the other decreases. Thus, as servant-leadership increases, students discipline decreases and, vice versa.

Discussion of Results

The finding on the relationship between servant-leadership and students' academic performance is supported by the study conducted by Kelly and Willemson (2006) on the relationship between principals' servant-leadership and students' academic achievement. This also corroborated the study conducted by David (2003). It is necessary to note that this study revealed that servant leadership and principals' effectiveness on students' discipline are inversely related which is also tangential to the findings of Hannigan (2008). But, this in an opposite direction to the findings of David (2003) who found that positive relationship existed between servant leadership and student discipline. Although, David drew his conclusion that it has a relationship with students' achievement and academic performance. However, Halwen (2008) in a study on the relationship between servant leadership and job satisfaction found that servant leadership was positively correlated to individuals' job satisfaction; this is also corroborated by this study that servant leadership has a relationship with teachers' level of discipline which also directly related to the teachers' job satisfaction.

Conclusion

From the findings of this study it could be concluded that servant leadership has a relationship with principals' effectiveness in terms of academic performance, discipline, and conducive school climate in the public secondary schools in the six geo-political zones in Nigeria.

Recommendations

Based on the findings in this study, the following recommendations are made:

1. It has been revealed that the tone of conducive school climate centre's on how leadership styles radiates round the staff which is said to be the engine room for the academic performance of the students. Hence, it is recommended that a nation-wide workshop on the servant leadership style should be organized to expose the leadership of the secondary schools on servant leadership constructs as upheld by Laub (1999) and Aaron (2008).

2. Policymakers and others are all too quick to draw conclusions about the effectiveness of principals and other change facilitators, based on a single factor or index. To point out the danger of this tendency, the results of this study is instructive that the of 19th and 20th centuries leadership style should change, and a multi-variable approach to school effectiveness should be adopted by the policymakers to bring about the necessary index of secondary school achievement.

3. Principals and teachers should be exposed to professional development opportunities requiring collaboration and relationship towards building the dimension of servant leadership once placed in a leadership position.
4. There must be a holistic motivation of principals and teachers in order to encourage optimal level of commitment to work. This will go a long way to improving their productivity towards achieving high academic performance of the students in public examinations.
5. The current exodus of Junior Teachers and Principals from the school system could be checkmated if Principals are encouraged to display more servant leadership characteristics than ever before.
6. External factors that reduce employee commitment to work like transportation problems, communication which are detrimental to the effectiveness of a servant leadership should be checkmated through the provision of such amenities.
7. Inadequate school equipment which is also a cog on high academic performance by the students should be improved upon as it will aid the outcome of an effective principals' leadership style.

References

Aguda, K. (2008). Management and Leadership, *Corporate Standard*, June –Sept. Vol. 3(1) 49.

Brown, A. (1999). *The Six Dimension of Leadership*, London**:** Random House Business Book.

David, H. J. (2003) Organization Servant Leadership and its Relationship to Secondary School Effectiveness. An unpublished Ph.D. Thesis, Florida Atlanta University.

Farling, M.L., Stone, A.G. and Winston, B.E. (1999).   Servant Leadership Setting the Stage for Empirical Research, *Journal of Leadership Studies,* 6(2) 49 – 72.

Freitas, N.M. (2003). Servant Leadership Characteristics in a Health Care Organizatio and the Relationship with Leader. M. Exchange. M.Sc. Thesis, University of Nebraska.

Fingel, H. (1999).*The Top Mistake Leaders Make*, USA: Victor books SP publication Inc.

Greenleaf, R.K. (1970). Servant Leadership, Retrieved May, 2009 from *http://en.wikipedia.org/wiki/servantb leadership*.

Greenleaf, R.K. (1977). *Servant Leadership, a Journey into the Nature of Legitimate Power and Fitness* New York: Pontlist Press.

Greenleaf, R.K. (1997). *Servant Leadership,* New York: Pontlist Press.

Hamilton, F. (2008). Servant Leadership in Marturano, A, and Gosling, J. Eds., *Leadership: key Concepts*, Routledge, London: pp. 146-150.

Jacobs, K.D and Kristanis, W.A (2006). An Assessment   of   Secondary Principals' Leadership Behaviours and Skills in Retaining and Renewing Science Educators in Urban Schools, London: *National Journal for Publishing and Mentoring*, 3 (1) 12-34.

Jimoh, A. S. (2004). Relationship between Principals Administrative Styles and Examination Malpractices: Implications for the Achievements of the Social Studies Objectives in Lagos State, *Journal of Research in Education Management*, 1 (1), 42.

Kelley, R. and Williamson, R. (2006). The Relationship between Servant Leadership Behaviour. High School Principals school climate Students Achievement, Michigan: Eastern Michigan University.

Laub, J.A. (1999). Assessing the Servant Organization Development of the Organizational Leadership Assessment (OLA) Instrument. A Doctor of Education Thesis Florida Atlantic University.

Patterson, K.A. (2003). Servant Leadership A Theoretical Model. Unpublished Doctoral Dissertation Regent University.

Sanyaolu, A and, Fanimo, D. (2007). The Concept of Leadership, *The Guardian*, December, 13th p. 27.

Solarin, T. (May,15,1994). Leadership means suffering. *The Sunday Tribune,* p. 4

Spear, L.C. (2002). *Tracing the Past, Present and Future of Servant Leadershi Focus on leadership: focus on leadership for the 21st century*, New York: John Willey & Sons Inc.

Steven, R.W. (2007), An Analysis of the Leadership Practices of the Churches of the Plymouth Brethren Movement in the United States, Unpublished Ph.D. Dissertations, Capella University.

Appendix 1
Student Performance in Selected Subjects in the Senior Secondary Certificate Examinations in Nigeria, 2004 -2008

Year	2004	%	2005	%	2006	%	2007	%	2008	%
English Language										
Total Sat	1,020,431		1,064,587		1,154,266		1,252,570		1,348,214	
Total Passed	604,371	**59**	644,017	**61**	769,001	**67**	846,209	**68**	899,091	**67**
Total Failed	383,882	**41**	393,311	**39**	342,311	**33**	379,006	**32**	422,686	**33**
Mathematics										
Total Sat	1,019,524		1,054,853		1,149,277		1,249,028		1,340,907	
Total Passed	633,594	**62**	670,582	**64**	829,999	**72**	917,868	**73**	1,086,031	**81**
Total Failed	351,512	**38**	363,055	**36**	286,823	**28**	302,774	**27**	229,021	**19**
Biology										
Total Sat	1,005,894		1,051,557		1,137,181		1,238,163		1,332,737	
Total Passed	624,647	**62**	689,677	**66**	852,171	**75**	810,564	**66**	798,341	**60**
Total Failed	348,890	**38**	338,491	**34**	261,200	**25**	402,148	**34**	506,089	**40**
Physics										
Total Sat	321,499		344,411		375,824		418,593		453,173	
Total Passed	248,849	**77**	244,979	**71**	305,224	**81**	320,969	**77**	311,823	**69**
Total Failed	61,940	**23**	89,150	**29**	62,119	**19**	88,480	**23**	124,420	**31**
Economics										
Total Sat	973,611		1,007,710		1,089,355		1,183,154		1,273,178	
Total Passed	726,802	**75**	781,286	**78**	896,216	**82**	883,647	**75**	1,038,984	**82**
Total Failed	216,736	**25**	206,654	**22**	171,145	**18**	270,918	**25**	212,481	**18**
Chemistry										
Total Sat	327,503		349,936		380,104		422,681		456,993	
Total Passed	207,580	**63**	243,773	**70**	257,093	**68**	298,964	**71**	319,760	**70**
Total Failed	107,318	**37**	95,495	**30**	114,475	**32**	111,322	**29**	116,892	**30**
Average Passed	**66.3**		**68.3**		**74.2**		**72**		**72**	
Failed	**33.7**		**31.7**		**25.8**		**28**		**28**	

Source: West African Examination Council/National Bureau of Statistics, Federal Republic of Nigeria (2009:209)

Appendix ii
Student Performance in English Language and Mathematic in the Senior School Certificate Examinations (SSCE), 2004-2008

Year	Total Sat	A1-C6	%	P7 –P8	%	F9	%
2004							
English lang.	1,020,431	301,980	29.59	302,391	29.63	382,882	37.61
Mathematics	1,019,524	346,410	33.97	287,184	28.16	351,512	34.47
2005							
English lang.	1,064,587	301,980	25.63	371,095	34.85	393,201	36.93
Mathematics	1,054,853	402,982	38.20	267,600	25.36	363,055	34.41
2006							
English lang.	1,154,266	375,007	32.48	393,994	34.13	342,311	29.65
Mathematics	1,149,277	472,674	41.12	357,325	31.09	286,823	24.95
2007							
English lang.	1,252,570	379,831	30.32	466,378	37.23	379,006	30.25
Mathematics	1,249,028	584,024	46.75	333,844	26.72	302,774	24.24
2008							
English lang.	1,348,214	470,635	34.90	428,456	31.78	422,686	31.35
Mathematics	1,340,907	767,596	57.24	318,435	23.74	229,021	17.07

Source: West African Examination Council/National Bureau of Statistics, Federal Republic of Nigeria (2009:209)