Teachers’ Characteristics as Correlates of Upper Basic School Students’ Performance in Social Studies in Yenagoa, Bayelsa State, Nigeria

DOI = 10.17556/jef.94590

Yusuf AbdulRaheem*, Bello Bolanle Muinat**, Owede Victory Collins***

Abstract
The purpose of the study examined teachers’ characteristics as correlates of upper basic school students’ performance in social studies in Yenagoa, Bayelsa State, Nigeria. The correlational research type was adopted for the study. The instruments used for the collection of data were a 36-item Questionnaire on Teachers’ Characteristics (QTC) and a 100-item Social Studies Performance Test (SSPT). The instruments were administered to 727 students randomly selected from 34 Basic Junior Secondary School Three (JSS. III), in Yenagoa metropolis, Bayelsa State. One research question was answered using the Pearson’s Product Moment Correlation (PPMC) while one null hypothesis was tested with the use of Multiple Regression Analysis at 0.05 level of significance. Based on the results obtained, it was revealed that both teachers’ use of instructional materials, teachers’ dispositions, teachers’ pedagogical skills and teachers’ reflective practice were found to have a significant relationship with upper basic school students’ performance in social studies respectively. The predictor variables were also significant in their relative and composite contribution to the prediction of the criterion variable. Thus, it was recommended among others that, faculties, institutes and colleges of education in Nigeria should as a matter of importance familiarize trainee teachers with relevant

*University of Ilorin, Ilorin. Nigeria, e-posta: yuabra25@gmail.com
**University of Ilorin, Ilorin. Nigeria, e-posta: Muhinat4islam@yahoo.com
***University of Ilorin, Ilorin. Nigeria, e-posta: victoryowede@gmail.com
components of reflective practice and integrates same in their teacher education programmes, if the purpose of producing quality teachers that will, in turn promote students’ performance is to be realized.

**Keywords:** Teachers’ Characteristics, Reflective Practice, Disposition, Pedagogical Skills, Students’ Performance, Upper Basic School

**Introduction**

In recent times, there has been emphasis and research evidence among educationists and scholars, in affirming that teachers are among the principal components of any educational programme. Akiri & Ugborugbo (2009) and Akbari & Allvar (2010) reported that teachers have a determining influence on students’ performance and also play a crucial role in educational attainment because the teacher is ultimately responsible for translating policy into action and principles based practice during interactions with the students. In other words, the success of both teaching and learning depends largely on the teacher. That is, teachers are among the major predictors of students’ achievement outcomes in schools. Thus, Darling-Hammond (1999), Rice (2003), Goe & Stickler (2008) and De Paola (2008) observed that teacher characteristics are inundated with certain recurring characteristics like teacher experience, qualification, certification, gender, preparation programmes and degrees, course work taken in anticipation of the profession, teachers’ own test scores and so on. For example, Ajayi (1987) identified teachers’ characteristics to be intellectual characteristics and cognitive ability, psychomotor abilities, affective characteristics, marital status, sex, experience or length of service and age.
In this study, however, our searchlight beamed on literature that treats the major variables. These variables of teachers' characteristics include teachers’ use of instructional resources, teachers’ dispositions, teachers’ pedagogy and teacher reflective practice. All these characteristics have been found by research evidence to have positive correlation with students’ academic performance or achievement. For example, Imogie (2001), Onyejemezi (2001), Offorma (2005), and Enem (2005) affirmed that there is a strong relationship between teachers’ use of instructional materials and students’ performance. Also, the opinions and research studies of Onwuka (1996), Cudahy, Finnan, Jarusze, Wicz and McCarthy (2002); Schulte, Edick, Edwards and Mackiel (2004), Thompson, Randell and Rousseau (2005), Carr (2007); Pacis and Weegar (2011), and Wilkerson and Lang (2011) confirm that students’ performance can be influenced by the teachers’ personality styles or dispositions.

Similarly, the empirical studies of Schon (1987), Nolan and Huebner (1989), Milrood (1999), Sanders (2000), Goldhaber (2002), Stronge (2002), Farrel (2003); and Akbari and Allvar (2010) prove that there is a statistically significant relationship between teachers’ reflective practice and students’ success in schools. National Board for Professional Teaching and Standards (NBPTS, 1998) in the United States of America, including Clark and Walsh (2002), and McKenzie (2003), were of the view that content, and pedagogical skills of practicing teachers are key to positively influencing students’ learning outcomes at all levels of learning.
Obviously, students’ performance is determined by the degree of learning outcomes in terms of scores and grades recorded against a student in a particular or series of school subjects. On this basis, what can we say is students’ performance? According to Opasola (2009), students’ academic performance is the process whereby students educational activities are measured by examination within the content of a curriculum. The central point to note from Opasola’s definition is that academic performance or achievement is a reflection of the students’ total learning experiences drawn from the instructional objectives presented during the classroom interaction. This construct is more often than not, interchangeably used to connote students’ academic achievement or learning outcomes. Through this construct, students are therefore categorized as high, medium and low ability students or achievers. This categorization is made possible by the use of tests, internal or external (standardized or state) examinations like the Basic Junior Secondary School Certificate Examination (BJSCE).

For example, the table below shows the trend of the performance of students in Social Studies in the Junior School Certificate Examination (JSSCE) in Yenagoa Local Government Area for 2006 – 2010.
Table 1. The Trend of Performance of Students in Social Studies in BJSCE in Yenagoa Local Government Area for 2006 – 2010

| Year | No. of Schools | Candidates Examined | A % | C % | P % | F % |
|------|----------------|---------------------|-----|-----|-----|-----|
| 2006 | 32             | 3380                | 16  | 600 | 2231| 533 |
|      |                |                     | (0.47)| (17.75) | (66.05) | (15.77) |
| 2007 | 34             | 3612                | 8   | 458 | 2334| 812 |
|      |                |                     | (0.22)| (12.68) | (64.62) | (22.48) |
| 2008 | 36             | 3983                | 2   | 425 | 3259| 297 |
|      |                |                     | (0.05)| (10.67) | (81.82) | (7.46) |
| 2009 | 43             | 4699                | 2   | 420 | 3734| 543 |
|      |                |                     | (0.04)| (8.94) | (79.46) | (11.56) |
| 2010 | 58             | 5452                | 5   | 331 | 2077| 3039|
|      |                |                     | (0.09)| (6.07) | (38.09) | (55.74) |

Source: Bayelsa State Ministry of Education, Yenagoa (2011).

It can be observed from Table 1 that there is a clear mark of fluctuation in the performance of students in Social Studies and several factors may have accounted for this trend.

The performance of students (i.e the result) in both internal and external examinations is usually sent to schools as feedback indicating what teachers and students should do to improve on future performance (Yara and Manjohi, 2011). Against this background, the poor and fluctuating performance of students in the core of Mathematics, English including Social Studies subjects in the Upper Basic Schools has been reported to have strong link to teachers
attributes or variables (Akiri & Ugborugbo, 2009; Sotoyinbo, 2009; Adeniyi, 2009).

Given the fluctuating performance of students in the Basic Junior School Certificate Examination (BJSCE) Social Studies in Bayelsa State in recent years, there has been in recent times, a growing body of research which indicates that students’ performance is more heavily influenced by teachers’ characteristics or quality than the students’ prior academic record, students’ race or parents’ level of educational attainment (Darling-Hammond, 1999). Ibe and Maduabum (2001) for example, reported that teacher qualification and experience are correlates of secondary school students’ achievement in Biology. The studies of Opasola (2009), Adeniyi (2009), Sotoyinbo (2009), Oladele (2010), Emmanuel (2010) and Raheem (2010) also reported that school variables such as teacher qualification, experience, class size, gender, teacher workload and the use of instructional materials influences students’ performance in Junior Secondary School Social Studies, Christian Religious Knowledge and Senior Secondary School Economics respectively. Similarly, Abuseji (2007), and Yara & Manjohi (2011) investigated Student And Teacher Related Variables as Determinants of Secondary School Students Achievement in Chemistry and Mathematics respectively, and found out that teacher age, gender, qualification and experience have direct causal effect on students performance in chemistry.

However, in the opinion of the researcher, most of the studies highlighted do not seek to capture the interaction among teachers’ use
of instructional materials, teachers’ reflective practice, his personal dispositions as well as pedagogy as predictors or correlates of students’ performance. As a result there are major gaps in these research studies that still need to be explored. In addition to this, these previous studies tend to focus more on teacher characteristics and students’ performance in subjects like Mathematics, Biology, Economics and Christian Religious Knowledge.

Closely related to the aforementioned variables, there is little or no empirical research linking teachers’ use of instructional resources, teachers’ dispositions, teachers’ reflective practice and pedagogical skills to students’ academic performance or achievement.

Therefore, this study bridged the perceived gap arising from the previous studies, by finding out the teachers’ use of instructional materials, teachers’ dispositions, teachers’ reflective practice and teachers’ pedagogical skills as correlates of students’ performance in Upper Basic School Social Studies with focus in Yenagoa Metropolis, Bayelsa State, Nigeria.

Research Questions

Based on the general purpose outlined above, the following research questions guided the study:

1. What relationship exists among the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) and the criterion variable (students’ academic performance in social studies)?
2. What are the relative contributions of each of the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) to the prediction of the criterion variable (students’ academic performance in social studies)?

3. What is the composite contribution of the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) to the prediction of the criterion variable (students’ academic performance in social studies)?

Methodology

The Correlational research type was adopted for the study. This design is considered appropriate for the study because it will enable the researcher to correlate teachers’ characteristics with Students Performance in Upper Basic School Social Studies, through the use of questionnaires and a performance test respectively.

The study covers both the public and private Basic Junior Secondary Schools located within the Yenagoa metropolis of Bayelsa State. The study specifically examines teachers’ characteristics such as, teachers’ use of instructional materials teachers’ dispositions, teachers’ pedagogical skills and teachers’ reflective practice as correlates of students’ performance in Upper Basic School Social Studies. Basic Junior Secondary School III students and Social Studies teachers participated in the study. Based on the estimated sample size in relation to the population as provided by the Research Advisors (2006), the researcher employed a simple random sampling technique to select Seven Hundred and Twenty Seven (727) students of Upper
Basic School III (BJSS III) from the Thirty Four (34) schools who participated in the 2011/2012 Basic Junior Secondary Certificate Examination in Yenagoa Metropolis.

The study made use of two instruments – Questionnaire on Teachers’ Characteristics (QTC) and a Social Studies Performance Test (SSPT) to examine teachers’ characteristics as correlates of Upper Basic School students’ performance in Social Studies. Copies of the QTC and SSPT were given to experts in Measurement and Evaluation in the Department of Social Sciences Education, University of Ilorin, to establish the face and content validity of the instruments. At the end of the administration of the instrument, 701 copies were retrieved. Thus, the data analyzed was based on 701 participants who returned copies of the QTC and SSPT. Lastly, Pearson’s Product Moment Correlation and Multiple Regression statistical techniques were employed to analyze the data collected for the study.

**Results**

**Research Question 1:** What relationship exists among the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) and the criterion variable (students’ academic performance in social studies)?
Table 2
Relationship between teachers’ use of instructional materials, personal disposition, pedagogical skill, reflective practice and students’ academic performance in social studies.

| Variables                      | Students’ Academic Performance in Social Studies | Pedagogical skill | Reflective Practice | Personal Disposition | Use of Instructional Materials |
|--------------------------------|-------------------------------------------------|-------------------|---------------------|-----------------------|--------------------------------|
| Students’ Academic Performance in Social Studies | 1                                               | .710              | .679                | .609                  | .611                           |
| Pedagogical skill             | .710*                                           | 1                 | .552                | .445                  | .707                           | .000                          |
| Reflective Practice           | .679*                                           | .552              | 1                   | .473                  | .571                           | .000                          |
| Personal Disposition          | .609*                                           | .445              | .473                | 1                     | .376                           | .000                          |
| Use of Instructional Materials| .611*                                           | .707              | .571                | .376                  | 1                              | .000                          |
| Mean                           | 57.1582                                         | 26.4718           | 23.0619             | 29.5475               | 29.2916                        |
| S.D                            | 14.5076                                         | 4.3369            | 4.2352              | 2.0624                | 6.0071                         |

*Significance at .05 level

In table 2, it is shown that there was significant positive relationship between pedagogical skill (r = .710), reflective practice (r = .679), personal disposition (r = .609), use of instructional materials (r = .611) and students’ academic performance in Social studies.
Research Question Two

1. What are the relative contributions of each of the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) to the prediction of the criterion variable (students’ academic performance in social studies)?

Table 3: Relative contribution of each of the predictor variables to the prediction of students’ academic performance in Social studies.

| Model                      | Unstandardized Coefficient | Standardized Coefficient | T     | Sig.  | Ranking |
|----------------------------|-----------------------------|--------------------------|-------|-------|---------|
| (Constant)                 | -28.855                     | 2.253                    | -12.806 | .000  |         |
| Pedagogical skill          | 1.225                       | .105                     | .366*  | 11.637 | .000    | 1*      |
| Reflective Practice        | 1.043                       | .095                     | .304*  | 10.984 | .000    | 2       |
| Personal Disposition       | 1.927                       | .174                     | .274*  | 11.096 | .000    | 3       |
| Use of Instructional      |                             |                          |       |       |         |
| Materials                 | .183                        | .076                     | .076*  | 2.416  | .016    | 4       |

In table 3, the result shows the relative contribution of each of the predictor variables on the students’ academic performance: Pedagogical skill ($\beta = .366, P < .05$), Reflective practice ($\beta = .304, P < .05$), Per-
sonal disposition ($\beta = .274, P < .05$) and Use of Instructional materials ($\beta = .076, P < .05$). The result shows that Pedagogical skill, Reflective practice, Personal disposition and Use of Instructional materials were significant in their relative contribution to the prediction of academic performance in social studies.

**Research Question Three**

3. What is the composite contribution of the predictor variables (use of instructional materials, personal disposition, pedagogical skill, reflective practice) to the prediction of the criterion variable (students’ academic performance in social studies)?

Table 4: Composite contribution of each of the independent variables to the prediction of students’ academic performance in social studies.

| df  | Model          | Sum of Square | Mean Square | F        | Sig.   |
|-----|----------------|---------------|-------------|----------|--------|
| 4*  | Regression     | 103881.900    | 25970.475   | 383.301* | .000   |
| 722*| Residual       | 48918.909     | 67.755      |          |        |
| 726 | Total          | 152800.809    |             |          |        |

R = .825
R² = .680*
Adj. R² = .678*

It is shown in table 4 that the composite contribution of predictor variables (use of instructional materials, personal disposition, pedagogical...
skill, reflective practice) to the prediction of the criterion variable (students’ academic performance in social studies) was significant ($F_{(4,722)} = 383.301; R = .825, R^2 = .680, \text{ Adj. } R^2 = .678$). About 68% of the variation in students’ academic performance in social studies was accounted for by the predictor variables.

Discussion

Given the important role that social studies plays in personal, social, community and national development, the performance of students in Social Studies at the Upper Basic School Certificate Examination (BJSCE) over the years continued to fluctuate and decline as evidenced in Table 1. This finding is in agreement with Akiri & Ugborugbo, 2009; Sotoyinbo, 2009; Adeniyi, 2009 who reported fluctuating performance of students in social studies.

The research question sought to know whether there is a correlation between teachers’ characteristics (teachers’ use of instructional materials, teachers’ dispositions, teachers’ pedagogical skills and teachers’ reflective practice) and students’ performance in upper basic school social studies. Teachers’ use of instructional materials showed significant correlation with students’ performance in social studies at the upper basic school level. Instructional materials is said to be an important element in teaching and learning of social studies, the result of this study corroborated Enem’s (2005) conclusion.
that, students taught with instructional materials performed better than students taught without instructional materials in social studies. However, the implication of the result is that instructional materials is very fundamental in bringing about effective learning which will, by extension, improve the performance of students.

The findings showed that there was significant positive relationship between the predictor variables and the criterion variable. The predictor variables were also significant in their composite contribution to the prediction of the criterion variable. This implies that teachers’ use of instructional materials, teachers’ dispositions, teachers’ pedagogical skills and teachers’ reflective practice were good predictors of students’ performance in social studies.

**Conclusion and Recommendations**

From the findings in this study, it is found that teachers’ pedagogical skills, teachers’ reflective practice, teachers’ use of instructional materials and teachers’ dispositions significantly predict students’ performance.

It should also be submitted here that the use of instructional materials by the teachers as well as their dispositions significantly predict students’ performance in this study, the import of instructional materials and teachers’ dispositions in the classroom situation should not be disregarded. The conclusion, however, is that social studies teachers should take the issue of enhancing and updating their peda-
gogical skills seriously, and they should consistently engaged themselves in reflective practice. That is if they hope to up and better the performance of students in social studies. The following are useful recommendations and suggestions for implementation.

a. The government at all levels with a meaningful and purposive collaboration with the organized private sector should periodically provide windows of opportunities like learned workshops, seminars and in-service trainings for social studies teachers to equip and improve their knowledge of teaching.

b. Social studies teachers should look for opportunities to improve themselves because knowledge is dynamic so also the teaching and learning of social studies.

c. Faculties, institutes and colleges of education in Nigeria should as a matter of importance familiarize student teachers with relevant components of reflective practice in their teacher education programme, if the purpose of graduating quality teachers that will in turn promote students’ performance is to be realized.

d. Criteria for recruiting new social studies teachers and other subject teachers should henceforth, include possession of adequate pedagogical skills and the ability to enhance students’ performance through reflective practice by the prospective teacher seeking to be employed as social studies teacher.
e. The promotion of teachers and other incentives to be given them should from now on be tied to how well the teacher influences the performances of his students.

f. As the task of reflectivity is demanding, video and audio recording gadgets are mounted in all classrooms by the management of every school. Also, there should be an in-built system of Students’ Assessment of Teachers Report (SATR) to be periodically done by the students themselves. This should be done side-by-side with the normal Annual Performance Evaluation Report (APER) for in-service teachers before promotion to the next grade level. The feedback from this assessment will enable teachers adjust where necessary.

g. There should also be constant supervision and monitoring of teachers by the inspectorate division of State and Federal ministries of education. This will no doubt, improve the quality of teaching and learning and by extension, students’ performance.

Government should institute Teachers Award (i.e. Local, State and National) system whereby teachers whose students performed excellently in internal and external exams are recognized and rewarded accordingly. With such award system in place teachers at all levels would always strive to positively influence the performances of their students.
REFERENCES

Abuseji, F. A. (2007). Student and teacher related variables as determinants of secondary school students’ academic achievement in chemistry. *Journal Pendidikan, 32, 3–18.*

Adeniyi, T. B. (2009). *Influence of selected teacher variables on secondary school students’ performance in social studies in Ado-Ekiti, Nigeria.* Unpublished M. Ed Thesis, University of Ilorin, Ilorin.

Ajayi, A. O. (1987). Teacher characteristics and human learning in school. In E. E. Ezewu, (ed), *Social Psychological Factors of Human Learning in School, Pp64-73.* Onitsha: Leadway Books Ltd.

Akbari, R. & Allvar, N. K. (2010). L2 Teacher characteristics as predictors of students’ academic achievement. *The Electronic Journal for English as a Second Language, 13(4), 1 – 22.*

Akiri, A. A. & Ugborugbo, N. M. (2009). Teachers’ effectiveness an students academic performance in public schools in Delta state, Nigeria. *Kamla-Raj Stud Home Communication Science, 3(2), 107-113.*

Ayodele, S. O. (2001). Quality, quantity, production and distribution of teaching Resources. In Nnoli, O. & Sulaiman, I. (Eds), *Reassessing...*
the Future of Education in Nigeria (63-77). Abuja: Education Tax Fund.

Bayelsa State Ministry of Education (2011). An extract of 5-years result of JSCE for Yenagoa L.G.A. Yenagoa.

Carr, M. (2007). Teachers’ dispositions and its effect on students’ performance. Retrieved from http://www.els.earlham.edu/gpdfiles/30/227/mattE_2008.pdf

Clark, J. C. & Walsh, J. (2002). Elements of a model of effective teachers. Retrieved April 1st, 2011. From http://www.aare.edu.au/02pap/wal0220.htm

Cudahy, D; Finnan, C; Jaruszewicz, C; & McCarty, B. (2002). Seeing dispositions: Translating our shared values into observable behaviour. A presented at the First Annual Symposium on Educators Dispositions. Richmond, Kentucky.

Darling-Hammond, L. (1999). Teacher quality and student achievement: A review of state policy evidence. Retrieved 13th December, 2010. From http://www.epaa.asu.edu/epaa/v801

De Paola, M. (2008). Does teacher quality affect student performance? Evidence from Italian university. Retrieved 13th December, 2010. From http://mpra.ub.uni-muenchen.de/8841/pdf

Emmanuel, S. (2010). The Influence of teachers’ characteristics and senior secondary students’ performance in economics in Ilorin West L. G. A. Unpublished B. Sc. (Ed) Research Project, University of Ilorin, Ilorin.

Enem, F. O. (2005). The importance of instructional materials to the successful implementation of social studies curriculum at junior secondary
school level. *Journal of Curriculum and Media Technology Research, 1*(11), 48 – 56.

Farrel, T. (2003). Reflective teaching: principles and practice. *English teaching Forum, 41*(4), 14 – 21.

Goe, L. & Stickler, L. M. (2008). *Teacher quality and student achievement: making the most of recent research*. Retrieved 13th December, 2010. From [http://www.nectq.org](http://www.nectq.org)

Goldhaber, D. (2002). The mystery of good teaching: Surveying the evidence on student achievement and teachers’ characteristics. *Education Next, 2*(1), 50-55.

Ibe, B. O & Maduabum, M. A. (2001). Teacher qualification and experience as correlates of secondary school students’ achievement in biology. *Educational Thought, 1*(2), 176-183.

Imogie, A. I. (2001). Optimization of instructional media. In Nnoli, O. & Sulaiman I. (Eds), *Reassessing the Future of Education in Nigeria*, Pp 91-101. Abuja: Education Tax Fund.

Mckenzie, J. (2003). Pedagogy does matter. *The Educational Technology Journal, 13*(1), 1-10.

Milrood, R. (1999). *A module for English language teacher trainers*. British Council: Moscow.

National Board for Professional Teaching Standards (1998). *Pedagogy – definition – summary*. Retrieved 7th April, 2011. From [http://www.intime.uni.edu/model/teacher/pedagogy/summary.html](http://www.intime.uni.edu/model/teacher/pedagogy/summary.html)

Norlan, J. & Huebner, T. (1989). Nurturing the reflective practitioner through instructional supervision: A review of literature. *Journal of Curriculum and Supervision, 4*(2), 126-143.
Offorma, G. C. (2005). Curriculum issues, resource provision and use in the arts and language teaching. *Journal of Curriculum and Media Technology Research, 1*(1), 162 – 178.

Oladele, O. T. (2010). *Teacher quality and students’ academic performance in C. R. S. in secondary schools, Ilorin – South L. G. A., Nigeria.* Unpublished B. A. (Ed) Research Project, University of Ilorin, Ilorin.

Onwuka, U. (1996). *Curriculum development for Africa.* Onitsha: Africana FEP Publishers Limited.

Onyejemezi, D. A. (2001). Quality, quantity, production and distribution of teaching resources/facilities. In Nnoli, O. & Sulaiman I. (Eds), *Reassessing the Future of Education in Nigeria, Pp 41-61.* Abuja: Education Tax Fund.

Opasola, A. J. (2009). *Influence of school variables on junior secondary school students’ performance in social studies in Afijio, Oyo State, Nigeria.* Unpublished M. Ed. Thesis, University of Ilorin, Ilorin.

Pacis, D. & Weegar, M. A. (2011). *Thoughts of one former elementary school principal on teacher dispositions, hiring practices and no child left behind.* Retrieved 7th April, 2011. From http://www.g-casa.com/conference/vietnam/paper/Pacis.pdf

Raheem, M. J. (2010). *Relationship between teachers’ characteristics and senior secondary school economics students’ performance in Ilorin, Nigeria.* Unpublished B. Sc. (Ed) Research Project, University of Ilorin, Ilorin.

Research Advisors, (2006). Sample size table. Retrieved 7th April, 2011. From http://research-advisors.com
Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Retrieved 18th February, 2011. From http://www.epi.com/book

Sanders, W. L. (1998). Value added assessment. *School Administrator, 11*(55), 24-27).

Schon, R. (1987). *Educating reflective practitioners*. San Francisco: Jossey Bass.

Schulte, L., Edick, N., Edwards, S., & Mackiel, D. (2004). *The development and validation of the teacher dispositions index*. Retrieved 7th April, 2011. From http://www.usca.edu/essays/vol122004/schulte.pdf

Simpson, J. A. & Weiner, E. S. C. (1989). *The Oxford English dictionary (2nd ed.).* Oxford: Clarendon Press.

Sotoyinbo, A. O. (2009). *Influence of teachers variables performance in social studies in Abeokuta metropolis, Nigeria* (Unpublished M. Ed. Thesis). University of Ilorin, Ilorin.

Stronge, J. H. (2002). *Qualities of effective teachers*. Retrieved 26th March, 2011. From http://www.zawodny.net/orientation%2006%20and/Theteachers a person.pdf

Thompson, S; Ransdell, M. & Rousseau, C. (2005). *Effective teachers in urban setting: Linking teacher disposition and student performance on standardized tests*. Retrieved from http://ww.dspace.sunyconnect-suny.edu/bitstream/handle/1951/6596/thompson.pdf
Wilkerson, J. R. & Lang, W. S. (2011). Standards-based teacher dispositions as necessary and measurable construct. *The International Journal of Educational and Psychological Assessment, 7*(2), 34 – 55.

Yara, P. O. & Wanjohi, W. C. (2011). Performance determinants of Kenya certificate of secondary education (KCSE) in mathematics of secondary schools in Nyamaiya division, Kenya. *Asian Social Science, 7*(2), 107 – 112.

Yara, P. O. (2009). Relationship between teachers’ attitude and students’ academic achievement in mathematics in some selected senior secondary schools in southwestern Nigeria. *European Journal of Social Sciences, 11*(3), 364 – 369.